ATHABASCA UNIVERSITY

EXPLORING FACULTY EDIA (EQUITY, DIVERSITY, INCLUSIVITY AND ACCESS) CAPACITY IN DENTAL EDUCATION

BY

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Approval of Thesis

The undersigned certify that they have read the thesis entitled

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Dedication

This thesis is dedicated to my fiancé, Dexter. Thank you for your endless patience and encouragement as I navigated the challenges of balancing graduate school and pursuing my career passions. You have picked me up out of my times of self-doubt and pushed me to realize my personal potential beyond what I thought possible. Thank you for giving me the space to flourish. I only hope to show you the same unconditional love and support in the many years to come. I love you, thank you for being 'my person'.

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Abstract

Increasing EDIA (Equity, Diversity, Inclusivity and Access) capacity is a priority for dentistry and dental hygiene education. There is a lack of direction within dental education for faculty members to develop comfort in EDIA subjects with direct implications on their ability to support the diverse learning needs of underrepresented students. Learning environments are significantly impacted by norms and practices engrained within current leadership and pedagogy and reinforced by faculty members. Recommendations for development are noted in the literature, yet evidence of perceived EDIA capacity of faculty members is limited. The purpose of this manuscript-thesis is to explore barriers impacting dental faculty's EDIA development and identify perceived strengths and weaknesses of current EDIA capacity. Using hermeneutic inquiry, new findings are revealed, identifying areas for diversity development at the organizational and personal level. The findings stand poised to increase discourse on effective organization of culturally supportive learning environments in dental education.

Keywords: dental education, underrepresented learners, equity, diversity, inclusivity, access, faculty members

Preface

As a dental hygiene educator, the subject of this research is of significant value to both my own personal EDIA development as well as that of Dalhousie University's Faculty of Dentistry, where I assume the role of a faculty member. I have witnessed firsthand the challenges in creating cultural change within post-secondary education to reflect the needs of our rapidly diversifying society. This includes the challenge of attracting and retaining students from segments of our population that have been historically oppressed and underrepresented. I have had the privileged opportunity to be an active participant in past and present Faculty EDIA initiatives at the Faculty of Dentistry and have been engaged in curricula that explores the impact of the social determinants of health on Canada's priority populations. These experiences have led me to this research and the question of 'how can we do better?'

I come into this research with a desire to understand and identify where the gaps exist in our current institutional culture for EDIA capacity. While recognition of systemic barriers to education and healthcare is crucially important to the evolution of post-secondary health education, it must be acknowledged that research and training in this field has limitations. Diversity training on the impact of institutionalized and systemic racism, discrimination, and bias can never accurately capture the lived experiences of our historically oppressed community members. Despite my personal convictions to educate myself on barriers for underrepresented students and engage meaningfully in reflexivity exercises to recognize my own implicit bias, I acknowledge that my values and perceptions are founded in my own experiences, privilege, and conceptualization of our world as a heteronormative White woman.

In qualitative research, the researcher's values and experiences are inherently present within the research process (Creswell & Poth, 2017). Previously, researchers have attempted to

employ a bracketing approach wherein they have set aside their own experiences, values and understanding to focus solely on those of their participants (Creswell & Poth, 2017). However, as Gadamer, a founding philosopher of hermeneutic methodology suggests, our sensitivity to history is integral to our consciousness; "our understanding of ourselves as being within history and shaped by history" (Gadamer 1960/2004 in McCaffrey et al., 2012, p. 215). In his interpretation, there is an impossibility of separation between pre-conceived knowledge and the pursuit and interpretation of new knowledge. As such, the hermeneutic researcher must embrace their own experiences, challenge their preconceived knowledge, and engage reflexively within them throughout the research process.

As an educator entrenched within the institutional environment of study and a member of the sample population, any attempt to bracket my experiences risks a gross misinterpretation of this phenomena, impacting the credibility of the findings on EDIA capacity at the Faculty of Dentistry. As such, the results of this research are based on my interpretation of participants' perceptions and subjective experiences of engaging with EDIA initiatives within the institution. It is my aim to use this research as a platform to explore where the strengths and weaknesses lie in EDIA at Dalhousie University's Faculty of Dentistry. These findings serve to offer a new narrative of EDIA in dental education and identify areas for future development. Significantly, these findings may have further transferability beyond dental education to other health professions Faculties.

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Definition of Terms

Underrepresented

Within the manuscripts that follow, the term underrepresented will be predominantly used in reference to individuals who are categorized based on race, ethnicity and other identifying characteristics and are identified as experiencing societal disadvantages in contrast to a dominant group (Song, 2020). This is consistent with the most current and accepted terminology to discuss these populations as per Dalhousie University's Healthy Populations Institute and the Ontario Human Rights Commission (2010). The terminology of 'historically oppressed' may also appear alongside underrepresented as an acceptable variation.

The terms 'marginalized', 'vulnerable', 'at-risk', 'non-minority' or 'visible minority' are deemed antiquated terms (OHRC, 2010). Use of this terminology perpetuates sentiments of victimization and the promotion of 'White' as the standard of normal in comparative race discussions (OHRC, 2010). Any use of these terms that appear within these manuscripts are in reference to resource citations and the authors' use of this terminology as it was accepted at the time of publication.

Additional terminology found within these manuscripts and their definitions are as follows:

Dental Education: Post-secondary dentistry and dental hygiene programs

DH: Dental Hygiene

DDS: Dentistry (Doctor of Dental Surgery)

EDIA: acronym for Equity, Diversity, Inclusivity and Access *

FoD: acronym for Faculty of Dentistry

Faculty: Capitalized; referring to the institutional structure

faculty: Lower case; referring to teaching members at the institution

Intersectionality: The influence of the intersection of social categorizations such as race, culture, class, gender and ethnicity on a person's or group's experiences, understanding and worldview (NCCJ, 2022).

Lived experience: Knowledge attained through direct involvement that imprints a lasting and significant interpretation (Frechette et al., 2020; Gadamer, 2004)

Unconscious bias: subconscious perceptions or learned attitudes that occur without one's knowledge that influence or control an individual's intentions and behaviours (GoC, 2021).

*EDIA concepts are further defined in Manuscript #2: "We talk teeth": Constructing a new narrative of EDIA (Equity, Diversity, Inclusivity and Access) capacity in dental education using hermeneutic inquiry.

Overview of Manuscripts

Manuscript #1: Promoting EDIA (Equity, Diversity, Inclusivity and Access) Capacity in Dental Education: A Narrative Literature Review. This manuscript is a narrative review of the literature on EDIA as it is presently understood, communicated, and enacted in dental education and within post-secondary institutional settings. As literature specific to EDIA in dental programming is limited, the scope of this review is inclusive of EDIA in other health professions programs. The aims of this review were to answer the following questions: i) What barriers are currently perceived in health education contributing to low EDIA capacity? ii) What strategies can be employed to promote EDIA development? And iii) Where are the current gaps in knowledge in our understanding of EDIA capacity in dental education?

Three databases were searched yielding 37 articles that met inclusion criteria for this review. Additional articles were sourced via review of dental education journals and hand searching of reference lists from articles meeting inclusion criteria. Data analysis involved a review of the literature and thematic identification based on emergent themes. Data was categorized into two major themes (MT): organizational and personal EDIA deficits and EDIA development strategies. Data under each major theme was subject to further thematic analysis and emergent sub-themes are presented within the manuscript that follows. This review identifies existing barriers to seeing meaningful EDIA development in dental education. Challenges to EDIA development are identified as stemming from deficits at the organizational level that impact leadership's approaches and faculty member engagement with EDIA. Dental faculty are identified as key contributors to the establishment and reinforcement of institutionally engrained practices that set precedence for the culture within both the clinical and didactic learning environments. This manuscript concludes with the identification of strategies and untapped

avenues for EDIA development in dental education. In addition to limited literature on EDIA capacity in dental education overall, confirmed gaps in knowledge include faculty member's personal perceptions of EDIA in dental education, warranting further research.

Manuscript #2: "We talk teeth": Constructing a New Narrative of EDIA (Equity, Diversity, Inclusivity and Access) Capacity in Dental Education Using Hermeneutic Inquiry. The second manuscript addresses a noted gap in EDIA understanding as identified in Manuscript #1; there is a current gap in knowledge of how dental faculty perceive and interpret EDIA in dental education. This lapse is significant as dental faculty members play a pivotal role in how EDIA is communicated, interpretated and enacted within these environments. This knowledge gap limits the ability of dental programs to devise meaningful avenues for EDIA development and to create inclusive learning environments within the Faculty for underrepresented students. It is the objective of this research to better understand current EDIA capacity in dental education as informed by the perceptions and experiences of faculty members themselves. The specific aims of this research sought to answer the following research questions: i) How do dental faculty perceive their personal EDIA capacity and that of the Faculty of Dentistry in supporting underrepresented students? And ii) What are the perceived strengths and weaknesses of current EDIA development at Dalhousie University's Faculty of Dentistry?

A hermeneutic methodology was used in this study. Methods of data collection included semi-structured interviews using a convenience sample. Ten active dental faculty members were recruited to explore current EDIA capacity at Dalhousie University's Faculty of Dentistry (FoD) in Halifax, Nova Scotia. The dialogic data provided by participants was subject to thematic identification and reflective hermeneutic interpretation, revealing six dominant interpretations: pathways to bias recognition, having the 'right' words, checking boxes for EDIA, hierarchical

lived experience, faith in others, and breaking bread, breaking barriers. Through the interpretative process, interrelated and divergent findings are identified as to how dental faculty members perceive their personal EDIA capacity and that of the FoD's learning environments. At the core of these findings, the impact and role of human emotion for true EDIA development is presented. The findings reveal a new narrative of EDIA, illuminating challenges and successes to seeing EDIA recognized and supported within dental education.

Synthesis of Manuscripts

To bring these manuscripts forward, it was necessary to explore what is currently known on EDIA in dental education and identify where current knowledge gaps exist. Manuscript #1 identified the limited literature specific to EDIA in dental education. Borrowing from the literature of other fields in health education, challenges to EDIA capacity building were identified as well as viable and untapped strategies for development. Manuscript #1 acknowledged a noted absence of the voice of dental faculty members to inform current EDIA capacity within dental programs. This knowledge gap informed the purpose of the study presented within Manuscript #2. This manuscript addressed the limited evidence on EDIA capacity in dental education through a hermeneutic exploration of dental faculty member's perceptions of their personal EDIA capacity and that of the FoD. The findings of this study echoed known challenges to EDIA development as presented in the literature in addition to identifying new challenges specific to the realm of dental education. The findings also illuminated EDIA strengths at the FoD that reflect novel and viable strategies for development in dental education and beyond. Presented concurrently, these two manuscripts construct a new and comprehensive narrative of EDIA capacity in dental education that acknowledges current limitations, reveals their complexities, and presents new findings that contribute to a

reconstruction of our current understanding. Addressing noted gaps in the literature, these findings contribute to the creation of a wholistic interpretation of EDIA that stands to inform pathways for future progress and ameliorated learning environments to support all students.

Significance of Findings

The findings of this research present a new interpretation of EDIA within dental education that addresses a noted gap, revealed through a thorough review of the literature and an immersive analysis of the experiences and perceptions of faculty members themselves. The narrative review presented emphasizes prevailing deficiencies in current organizational approaches to EDIA. Importantly, this review reveals that challenges to EDIA permeate across post-secondary health education, signalling a need for increased exploration of strategies to mitigate issues of limited representation, institutionally engrained bias and tokenistic approaches to capacity building.

Highlighting development strategies from across health education, this review contributes to the literature by identifying viable avenues for faculty development that remain to be fully explored such as community and interinstitutional partnerships. Poignantly, this review draws stark attention to limitations on what is currently known on EDIA within dental education. Acknowledging this limitation, this review identified a need for research involving dental faculty members personal perceptions and experiences of EDIA to inform current capacity in the dental learning environment.

The research study that formed the basis of this thesis research was therefore informed and designed based on the identification of this current gap. Through this research, organizational and personal strengths and weaknesses at the FoD to seeing inclusive and equitable learning environments for underrepresented students in dental education are brought to

the forefront. This research is of significance as it identifies looming challenges to seeing EDIA effectively integrated into dental education, stemming from the interpretation and ideals imposed on these concepts by the broader institution and at the leadership level. It further reveals that how EDIA is packaged and communicated to faculty members bears significant influence on their personal interpretation and behaviours. EDIA messaging is identified as impacting faculty's motivation to engage in opportunities that are conducive to increasing understanding of unconscious bias and barriers that exist for underrepresented students within dental education.

These new findings revealed the impact of emotionally provocative and communal social experiences for dental faculty members' EDIA development. Current institutional models for formalized EDIA training are acknowledged as avenues to establish a foundational understanding of concepts such as bias, stereotyping and racism. However, this research identifies the limitations to these models and a need for Faculty leadership to channel resources to the mobilization of informal opportunities for EDIA that promote widespread Faculty gathering and togetherness. Involvement in social, community building events both inside and outside the structures of the institution are identified as resonant avenues for EDIA capacity development. Currently, compartmentalized institutional metrics for EDIA based upon hierarchical interpretations of 'expert voices' in EDIA are hindering sustainable change in dental education. This research highlights that missing within current approaches is a truly inclusive interpretation of EDIA that values and validates the experiences of many to inform and drive meaningful avenues for EDIA development.

The findings identify a need for the integration of EDIA as habitual and normative practices which can be achieved through accessible and enjoyable social opportunities within the Faculty that resonate with members on an emotional level. For dental faculty members to be

effective stewards of learning and mentorship for underrepresented students, the pursuit of new ideas and strategies presented within this research stand to make significant and sustainable changes for EDIA capacity in dental education. In light of these compelling findings, I argue that this thesis research fills a void on what is currently known about EDIA capacity in dental education, confirming its significance and value to the literature on EDIA capacity building in dental and health education overall.

Limitations

A limitation to this research is that EDIA cannot be discussed in finite terms. Just as the current literature on best practices recommendations and strategies for EDIA is constantly evolving, so too are the needs of underrepresented learners within the institutional setting. Themes identified within this study relating to developing self-awareness, recognizing bias and appropriate terms, interpersonal and communal learning and recognizing the needs and barriers of diverse others, are all representative of evolutionary processes. As a result, the conclusions about EDIA in dental education brought forward in this manuscript are subjective and apt to change with the landscape of our diverse society and the needs of learners.

In addition, despite dedicated methods to promote rigour and credibility in the findings, it must be noted this study was limited to dental faculty at a single dental institution. Further, as an 'insider-outsider' researcher at this institution, my interpretations will be unique and subjective to individualistic approaches to meaning-making. This may pose a challenge to the transferability of the findings to other dental education settings and is noted as a limitation to this research.

Strengths and Future Research

The richness of the data and findings on EDIA capacity at Dalhousie University's Faculty of Dentistry points to the need for additional research on how EDIA is experienced across dental programs. Further research in this area can serve to inform additional gaps in understanding and provide insight on current practices for capacity building. As well, increased discourse on EDIA overall in dental education is conducive to seeing viable recommendations and changes prioritized. A closer analysis of community-based and cross-institutional partnerships and social avenues for interfaculty community building are identified as areas meriting additional research. Further inquiry into how dental leadership interpret and promote institutional messaging on EDIA and how this is communicated within the learning setting is also identified as requiring expanded focus and analysis.

Further research in understanding how EDIA is perceived by faculty members also stands to be explored beyond the scope of a single institutional site for dental education. The methods used within this study are identified as highly replicable and transferable to other dental and health professions programs looking to prioritize EDIA and enact changes in the learning environment for underrepresented students. Increasing the collective discourse on EDIA across all allied health professions programs is a fundamental requirement to see these concepts integrated into normative practices that permeate across our health disciplines for the betterment of student learning, patient care and overall healthcare equity in Canada.

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Manuscript #1: Promoting EDIA (Equity, Diversity, Inclusivity and Access) Capacity in Dental Education: A Narrative Literature Review

Abstract

Purpose: Limited diversity among oral health professionals is contributing to poor oral and overall health outcomes for underrepresented populations. This can be addressed through institutional prioritization of improving **Equity, Diversity, Inclusivity and Access** (EDIA) capacity and supports for underrepresented students in dental (dentistry and dental hygiene) programs. As such, the aims of this review were to address i) What barriers are currently perceived in health education contributing to low EDIA capacity? ii) What strategies can be employed to promote EDIA development? And iii) Where are the current gaps in knowledge in our understanding of EDIA capacity in dental education?

Methods: A narrative literature was conducted to address these aims. Acknowledging limited literature specific to EDIA in dental education, this review included literature from other fields of health education. Literature published in the past 10 years were reviewed using Boolean searches of PubMed, CINAHL and Discover databases.

Results: Barriers for EDIA development are identified at the organizational and faculty member level. Low representation of underrepresented groups, institutional biases, and tokenistic approaches to EDIA are current deficits. Strategies to improve EDIA are identified within the health education literature with application to dental programming. Increased engagement with EDIA initiatives, pedagogy, mentorship, community-based and interinstitutional partnerships hold potential for meaningful change.

Conclusions: EDIA capacity building in dental education is currently hindered by a misallocation of resources better directed to facilitating diverse engagement opportunities for

faculty and organizational partnerships that can support meaningful EDIA evolution in dental education.

Keywords: underrepresented students, diversity, inclusivity, access, equity, dental education, leadership, faculty engagement, unconscious bias, Eurocentric curriculum

Introduction

Post-secondary learning institutions in North America are identified as operating largely under a White, normative Eurocentric model; one in which postcolonial approaches to learning that emphasize a Western European worldview continue to dominate (McGibbon et al., 2014). Initiatives and strategic planning encompassing of the concepts of Equity, Diversity, Inclusivity and Access (EDIA) are required for post-secondary institutions looking to build equitable teaching and learning environments (Swartz et al., 2019). Diversity is defined as a wide range of human qualities encompassing of, but not limited to, ethnicity, race, and gender (Ontario Human Rights Commission, 2010). Within the health professions, including dental education (dentistry and dental hygiene), EDIA capacity building is acknowledged as a priority agenda. An emphasis on progressing EDIA is driven by presently identified discrepancies in overall Faculty diversity (Arday, 2018). This includes challenges relating to the recruitment and retainment of underrepresented students within dental programs. The magnitude of this challenge is acknowledged in considering that increased representation of clinical providers from racialized and underrepresented groups has been linked to increased access and improved health outcomes for underserved populations (Aysola et al., 2018; Behar-Horenstein et al., 2017; Bouye et al., 2016; Mertz et al., 2016). Current challenges to EDIA in dental education therefore have reverberating implications on population health outcomes.

The ways in which faculty members approach the learning environment are commonly framed within the value systems of the institutions where they are employed (Arday, 2018; McGibbon et al., 2014; Zappas et al., 2021). These values are often influenced by a reliance on singularly-focused teaching models, particularly those constrained to a Western interpretation of learning (McGibbon et al., 2014; Zappas et al., 2021). These value systems are significant in the

context of their application to the learning environment where morals and values upheld at the faculty member level have significant implications for the student experience (Arday, 2018; Risner et al., 2020). The reinforcement of conscious and unconsciously engrained biases and preferences within leadership and teaching approaches are problematically identified as silently propagating cycles of inequity, racism, and prejudice within the learning settings (McGibbon et al., 2014; Zappas et al., 2021).

Teaching style is also greatly influenced by an instructor's own experiences and curricular content is influenced by personal ideas and worldviews (Behar-Horenstein et al., 2016; O'Leary et al., 2020; Lai, 2013). Unconscious bias is defined as the subconscious perceptions or learned attitudes that occur without one's knowledge. These perceptions are significant as they influence or control one's intentions and behaviours (GoC, 2021). The influence of unconscious bias within learning settings are currently identified as a major deficiency amongst teaching faculty (Arday, 2018; Zappas et al., 2021). This represents a barrier to providing culturally sensitive curricula and the ability of faculty to create inclusive environments. Resultingly, these biases mar underrepresented students' access to an equitable educational experience (Arday, 2018; McGibbon et al., 2014; O'Leary et al., 2020; Zappas et al., 2021).

For these students, educational performance and self-perception can be detrimentally impacted by leadership approaches that reinforce stereotypes and lack familiarity with EDIA concepts (Strayhorn, 2020). This gap in knowledge at the faculty level is identified as a contributing factor to low application and retainment rates of underrepresented students in dental programs (Behar-Horenstein et al., 2017).

To address identified deficits in EDIA, the research suggests that health professions Faculties can progress EDIA capacity through the implementation of multifaceted strategies situated at different tiers of the institutional and faculty structure. Despite the EDIA development strategies discussed in the health literature however, little is known specific to EDIA and dental education. This knowledge gap confirms that increased research in this area is warranted. The objective of this narrative literature review is to address this current gap in understanding of current EDIA capacity within dental education. The specific aims of this review are to answer the following research questions: i) What barriers are currently perceived in health education contributing to low EDIA capacity? ii) What strategies can be employed to promote EDIA development? and iii) Where are the current gaps in knowledge in our understanding of EDIA capacity in dental education? In acknowledgement of the limited literature specific to EDIA capacity building in dental education, this review draws from strategies for EDIA development in other health education programs and demonstrates viable applicability to dental programming.

Methods

Search Strategy

This narrative literature review was conducted using a six-step approach: problem identification, literature review, data analysis, theme identification, discussion of findings and acknowledgement of gaps in understanding warranting further research. To better understand EDIA development strategies within the post-secondary learning environment, a review of the literature was conducted using PubMed, CINAHL with Full Text and Discover unified database by EBSCO. Identical inclusion parameters were applied to all database searches which limited yield to peer-reviewed journal articles, published in the last 10 years, in English. A

Boolean search strategy was used to facilitate the retrieval of journal articles that combined themes regarding EDIA in dental education (See Table 1).

Three subject-specific database searches via PubMed were completed to source the most relevant articles on the subject of study, as presented in dental and other health education fields. The first search via PubMed was conducted using the inclusion criteria above and yielded a total of 198 results. Following review of articles retrieved, only three were determined to be of relevance to inclusion and diversity strategies in post-secondary health programs. One of these retrieved articles was specific to the field of dentistry. Two follow-up searches using PubMed and an expanded Boolean search term strategy were conducted from which a combined total 391 articles were retrieved. Once duplicates were removed, and articles were reviewed for relevancy to the subject, 17 articles were selected for inclusion to support the discussion of EDIA in dental education.

CINAHL with Full-Text was also used in review of the existing literature utilizing the same inclusion parameters and modified Boolean search terms (Table 1). The results of this search were vast, producing a total of 2453 articles over 30 pages of results. The first 10 pages of results were reviewed for duplication and relevancy. Duplicate articles identified via previously conducted PubMed search were excluded from further review. A total of 10 articles were selected for inclusion on the discussion of dental faculty EDIA. A final database search was conducted using Discover unified database by EBSCO, using the same inclusion criteria and a modified Boolean search strategy (Table 1). Of the 368 articles produced, four articles were selected as relevant following researcher review. All four articles were specific to dental programming and related to faculty EDIA and barriers for underrepresented within this academic

setting. The results of this review process verified 37 articles as satisfying inclusion requirements. Figure 1 illustrates this review process as outlined.

Additional articles retrieved about EDIA, strategies for promoting inclusivity in dental education, and identified challenges to EDIA development were retrieved through subsequent review of relevant online journal issues such as *The Journal of Dental Education* and *The Journal of Dental Hygiene*. Further to this, articles were sourced using hand searching of reference lists of articles retrieved and considered to be of high relevance to the subject of study. These additional sources were vetted for satisfying inclusion requirements and providing important contextual information on the topic of studying EDIA capacity amongst dental faculty and targeted improvement recommendations.

Critical Appraisal and Data Extraction

Critical appraisal of studies used in this review followed a process of title, followed by abstract screening. Articles were then subject to a full-text review by the researcher and appraised based on relevancy to EDIA within post-secondary and dental and health professions education. Due to the current gap in the literature on EDIA in dental education, articles on this topic within other health faculties such as nursing and medicine were included to support the findings and discussion in application of these ideas to dental programming. Emergent themes were identified and extracted from the sources reviewed.

Analysis and Synthesis

A synthesis of the data was performed using thematic analysis. This process included the categorization of findings in to two major themes (MT): organizational and personal EDIA deficits and EDIA development strategies; used as title headings within the findings. This was followed by subsequent concentrated analysis of the data under each major theme and

categorization into emergent sub-themes. In addition, a critical review of major themes and sub-themes was conducted using triangulation with other research team members as a method to reduce bias and promote rigour and credibility in the findings.

Findings

A thorough analysis of the current literature revealed several prevailing deficits to seeing EDIA capacity developed within dental and health education programs. The three deficits identified were informed by emergent discussion in the literature of barriers to diversity and inclusion pinpointed at different tiers of the Faculty structure; the organizational and faculty member level. Each of these themes are synthesized and presented in the overview that follows. Using the literature available on dental education, and bolstered by evidence from other health professions, five prospective strategies for meaningful EDIA capacity development are also discussed. These strategies address the deficits identified and inform pathways for EDIA progression in dental education.

MT-1: Organizational and Personal EDIA Deficits

Barriers to diversifying and developing strategies for EDIA are felt at both the organizational and personal level (Arday 2018; Swartz et al., 2019). At the organizational level, the literature identifies inequitable resource allocation and distribution across health professions programs as negatively impacting the ability to build EDIA infrastructure within Faculties (Behar-Horenstein, 2017; Campbell et al., 2020, Vick et al., 2018). Commonly, funding for EDIA initiatives finds itself in direct competition with competing Faculty needs and operational costs (Vick et al., 2018). This has implications at the personal level for faculty members, as allocating attention and resources to the recruitment of underrepresented groups often undermines required resource development for faculty members (Vick et al., 2018). In the

creation of diverse and supportive learning environments, investment in avenues for faculty to foster their understanding of barriers for underrepresented students and build competency in culturally sensitive approaches to teaching can serve to "improve an institution's capacity to address the quality of the context" (Vick et al., 2018, p.56) as it relates to promoting EDIA. Ultimately, funding discrepancies for faculty development opportunities contribute to limitations for faculty members in accessing appropriate EDIA resources and training (Campbell et al., 2020; Vick et al., 2018).

MT-1.1 Representation in Faculty Composition

Deficiencies in representation are also significant as they have reverberating implications on the context of overall Faculty structure (Arday, 2018). Diversity in the workplace has been found to bolster EDIA skills, understanding of diverse populations and improve interpersonal communication (Alonzo et al., 2019). Dental faculty, and those appointed to leadership and upper administrative positions within post-secondary institutions, are overwhelmingly represented by White or non-minority identifying persons (Arday, 2018; Martinez-Acosta & Favero, 2018). A need for increased representation of minority leaders has been acknowledged at the University level, however equitable pathways to tenure and senior leadership positions continue to be limited (Arday, 2018). A lack of in-house diversity and formal structures to support minority faculty and leadership candidates is identified as leading to a stagnation of overall Faculty EDIA development (Arday, 2018). The significance of this discrepancy is supported in the literature where increases in underrepresented faculty members and leadership have been identified as a strategy to counteract the impact of systemic racism on racialized students. This increased representation promotes processes of decolonizing racist policies and practice in post-secondary institutions (Shankar et al., 2013).

MT-1.2 Institutionally Engrained Bias

Hindering the ability of institutions to assert change for more inclusive educational environments is the false conceptualization of colonialism as being an issue of the past (McGibbon et al., 2014). Studies on educators in the field of nursing have revealed a prevailing perception from White faculty members that the racist injustices experienced by historically oppressed populations in the past is without implications on current practice and pedagogy (McGibbon et al., 2014). Furthermore, there exists a held belief within health programs dominated by the concept of equality; a presumption that all individuals are inherently granted equal opportunities (Arday, 2018; McGibbon et al., 2014). These presumptions actively negate the lived experiences of historically oppressed individuals and the impact of colonialism in the perpetuation of cultural insensitivity and Eurocentric models of learning (Arday, 2018; McGibbon et al., 2014).

For dental faculty, Eurocentric approaches to pedagogy and patient care are often unconsciously influenced by the pre-established culture within the learning environment (McGibbon et al., 2014). This is often not the fault of individuals alone, but reflective of the long-standing policies and practices that continue to promote biased assumptions within the Faculty (McGibbon et al., 2014; Vick et al., 2018; Zappas et al., 2021). These normative processes are identified as reinforcing racially insensitive language and behaviours, contributing to ‘invisible’ prejudice amongst leadership and faculty (Arday, 2018; McGibbon et al., 2014; Vick et al., 2018; Zappas et al., 2021). These assumptions are particularly concerning in the context of students’ personal and professional development. Findings from the literature suggest that students from racialized groups are more likely to be stereotyped as delinquent or lacking in academic potential by faculty members in health education programs (Shankar et al., 2013).

MT-1.3 Tokenism in EDIA

There exists a surplus of literature within health education describing proposed EDIA training programs for faculty members. The vast majority of these programs are described as opportunities for faculty to become educated on institutional racism and unconscious bias (Campbell et al., 2020; Martinez-Acosta & Favero, 2018; O'Leary et al., 2020). Problematic however, is that these programs are also cited as tokenistic in their approach and content matter (Arday, 2018). Surface-level program efforts for faculty members' EDIA improvement in health education continues to reflect a lack of recognition by the institution of the barriers faced by underrepresented populations (Arday, 2018). This gap has lent to diversity initiatives that are lacking in promoting widespread inclusivity and as a result are insufficient in achieving desired EDIA outcomes (Risner et al., 2019).

Furthermore, many institutions' diversity agendas are found to be disconnected from actual practices in place, leading to a lack of accountability from leadership to seeing meaningful change realized at the faculty member level (Arday, 2018; Martinez-Acosta & Favero, 2018). To mitigate these challenges, leadership are encouraged to establish methods for data collection and mechanisms of tracking of progress of institutional EDIA initiatives in order to hold themselves accountable to their diversity mandates (Campbell et al., 2020). These findings reinforce there is a lack of substantial planning, monitoring and full-faculty engagement in initiatives and opportunities that can promote EDIA values and can begin the process of enacting institutional cultural change (Arday, 2018; Martinez-Acosta & Favero, 2018; Campbell et al., 2020).

MT-2: EDIA Development Strategies

MT-2.1 Mentorship

The development of inclusive environments has been found to have significant positive implications for both faculty and student learners (Risner et al., 2020). For students, this leads to improved academic output, academic persistence, and improved retention rates (Risner et al., 2019). Inclusive institutional cultures overall have been found to promote productivity, self-efficacy, success, and career satisfaction (Risner et al., 2020). A prominent strategy from the literature for developing inclusivity in the institutional setting is identified through the establishment of mentorship opportunities for underrepresented students. These mentorship models are suggestive of a robust opportunity for faculty members to understand equity discrepancies, increase their knowledge of diverse culture backgrounds and help in the self-identification of held biases (Campbell et al., 2020; Martinez-Acosta & Favero, 2018; Zappas et al., 2021). Supportive mentor-mentee partnerships are equally identified as avenues for discussion regarding best approaches to race-discordant relationships and the identification of microaggressions that may be contributing to non-inclusive institutional culture (Campbell et al., 2020; Martinez-Acosta & Favero; 2018; Zappas et al., 2021).

Supportive faculty-student relationships are an encouraged avenue through which faculty can exercise encouragement and promote program persistence for mentees from underrepresented groups (Risner et al., 2019). Opportunities between faculty and students that encourages active mentee engagement in important tasks, critical discussion and research have been shown to positively stimulate students' sense of belonging and has been identified as a heavy predictor in favour of program retainment (Estrada et al., 2019; Risner et al., 2019; Strayhorn, 2020). For underrepresented students, strong social networking with faculty and high academic encouragement were found to partially compensate for perceived disadvantages related

to ethnic background (Mishra, 2020). Positive mentorship experiences are further identified as a strategy to support underrepresented individual's accession into academia and leadership roles with positive implications for building representation with the institution (Arday, 2018). These findings recognize the need for Faculty-wide discussion of strategies to employ mentorship opportunities and increase avenues for supportive faculty-student interactions.

MT-2.2 EDIA Facilitators

At the leadership level, increasing funding allocation for faculty training and EDIA centered initiatives has been noted as a key element to enacting institutional culture change (Martinez-Acosta & Favero, 2018; O'Leary et al., 2020). Leadership engagement with, and hiring of, trained facilitators in diversity and inclusivity development are one avenue for increasing faculty familiarity with EDIA (Martinez-Acosta & Favero, 2018). Regular mediated group discussions that facilitate open dialogue on departmental diversity and implicit bias are recommended for integration into regular Faculty continuing education initiatives (Martinez-Acosta & Favero, 2018; Zappas et al., 2021). Personal and interpersonal reflection exercises on bias have been found to positively impact individual's cultural competency development and helps to identify unconscious practices that may be perpetuating cycles of institutional bias (Campbell et al., 2020; Martinez-Acosta & Favero, 2018; McGibbon et al., 2014; Zappas et al., 2021). Opportunities for faculty to engage in reflective discourse with others can serve to identify prejudgements and promote the advancement of ideas (O'Leary et al., 2020). Increased diversity in thought has been found to positively influence student learning regardless of ethnic or racial background. The literature highlights that there is a further need for concentrated and immersive approaches for faculty members' personal development in this area in order to see

developments reflected in other areas such as inclusive curriculum content and delivery models (Campbell et al., 2020, O'Leary et al., 2020).

In support of these types of facilitated initiatives, a three-year phenomenological analysis of STEM faculty's involvement in multi-day EDIA themed teaching workshops revealed a positive association between workshop participation and participant's recognition of educational inequities for underrepresented students. Further to this, faculty members reported an increased willingness to implement new curricula strategies to develop more inclusive pedagogy (O'Leary et al., 2020).

The literature also recommends that faculty leadership should seek to actively engage with contributors in the fields of minority health disparities and culturally safe care (Martinez-Acosta & Favero, 2018). Prioritization of invitations to field experts to serve as guest-speakers is identified as a positive contributor to increasing faculty's contextual knowledge of issues faced by underrepresented groups (Martinez-Acosta & Favero, 2018). Increasing faculty discourse on social determinants of health impacting underrepresented students and diverse patient populations will serve to facilitate faculty members' capacity to critically assess for discrepancies in current theories, methods, and training in EDIA. These opportunities stand to promote new interpretations of how EDIA concepts are communicated in the learning setting which can serve to better prepare culturally competent future healthcare providers (Behar-Horenstein et al., 2017; Martinez-Acosta & Favero, 2018; Zappas et al., 2021).

MT-2.3 Institutional Collaboration

At the organizational level, EDIA capacity in dental education can be improved through the increased implementation of strategies to promote diversity recognition and understanding. An identified weakness in promoting diversity and inclusivity within health professions

programs stems from a lack of collaboration across post-secondary institutions (Campbell et al., 2020). This lack of collaboration has been determined to lead to significant variations and discrepancies in how concepts of EDIA and culturally competent care provision are being integrated into the curricula (Arday, 2018; Campbell et al., 2020). Inter-institutional collaboration is therefore heralded as a promising avenue for diversity development, particularly in health professions programs (Campbell et al., 2020). The establishment of program-specific networks across institutions are identified as a strategy to identify and discuss plans for addressing common challenges related to EDIA capacity building and student recruitment. These collaborative networks are also conducive to the promotion and cross-appointment of faculty members from underrepresented groups (Arday 2018; Campbell et al., 2020). The application of this model to dental education stands to increase the collective knowledge base on EDIA, identify curriculum deficits, as well as the identification of underrepresented student groups in dental education overall that merit targeted recruitment strategies and priority.

In addition, the literature recommends that Faculties looking to bolster EDIA capacity pursue collaboration with institutions proficient in, or valued as models of inclusion and diversity. Collaboration with these institutions can facilitate external review processes of existing or newly introduced EDIA programming (Martinez-Acosta & Favero, 2018). This not only serves to strengthen inter-institutional partnerships but supports the external identification of organizational deficits that may be contributing to inequitable environments within health programs (Martinez-Acosta & Favero, 2018).

MT-2.4 Curriculum Deconstruction

Identified as a priority area within the realm of nursing education, is the need for the introduction of Critical Antidiscriminatory Pedagogy into faculty-taught curricula (Zappas et al.,

2021). This is encompassing of curriculum content that emphasizes the influence of power dynamics, race/ethnicity, and social determinants on the health outcomes of historically oppressed groups (Zappas et al., 2021). Recommendations include increased use and development of clinical case studies that move away from merely a diagnosis-treatment discussion to one inclusive of racialized health determinants and barriers (Behar-Horenstein et al., 2017; Zappas et al., 2021).

The use of case study learning is a prominent feature of current dental curriculum and holds potential for discussions of diverse cultural needs and barriers experienced by underrepresented groups. Further to this, faculty-facilitated case study discourse is viewed as a metric by which EDIA discrepancies in current pedagogy can be uncovered. Therefore, increased faculty training in this pedagogical model is highlighted as beneficial to EDIA development in the literature (Behar-Horenstein et al., 2017). Overall immersion of faculty members in pedagogy interventions, often in the form of workshops, have been evaluated as helpful for faculty members to develop instructional strategies that are intentional and considerate of diverse worldviews and experiences (O'Leary et al., 2020).

MT-2.5: Community-Based Education Initiatives

Community outreach clinics and programming are representative of an imperative strategy for strengthening EDIA at the student level and holds potential for similar impacts on faculty's EDIA development (Birch, 2013; Keselyak et al., 2011; Moodley & Singh, 2018). These programs operate under the concept of service-learning, where students' clinical training intersects with addressing the dental health needs of targeted, underserved population groups (Keselyak et al., 2011). Community-based education (CBE) opportunities have been identified as a strategic development priority for dental faculty leadership as CBE has been shown to produce

dental practitioners better equipped to provide empathic, and culturally appropriate patient-centered care to diverse populations (Moodley & Singh, 2018; Keselyak et al., 2011). Community partnership models have shown demonstrated success in ameliorating student's ability to work collaboratively with diverse community members and facilitate increased understanding of the social contexts influencing disease and health status within underserved communities (Moodley & Singh, 2018). The impact of these initiatives on faculty members own EDIA development is a noted gap in the current literature that warrants increased exploration (Ocegeuda et al., 2016; Sabo et al., 2015).

In a study of dental hygiene leadership's valuation of cultural competency education (CCE), Keselyak et al. (2011) found that program directors in the United States identified CCE as an integral part of dental hygiene curriculum and reported overall satisfaction with their efforts to implementing CCE within the curricula. An important limitation in their findings was a lack of any evaluation of how leadership and faculty members interpreted cultural competency and how EDIA concepts are translated by teaching faculty within these environments (Keselyak et al., 2011). This limitation is significant, as it further highlights a gap in knowledge as to whether dental faculty's own EDIA development is similarly impacted by their involvement with these programs or whether they are merely representative of a necessary avenue to meet accreditation standards. Noted by Lai (2013), the structure of dental education in North America follows a mimetic isomorphic approach; meaning that organizations mimic the actions of those in their field perceived as being most successful. As such, dental schools and subsequently the structure of their community -based programs, look much the same across North America (Lai, 2013). Warranted is an increased exploration of CBE involvement and its impact on faculty's EDIA attitudes and behaviours (Lai, 2013; Simmer-Beck et al., 2013).

Discussion

The purpose of this narrative review was to understand the prevailing barriers to building EDIA capacity in dental education. Further, it sought to identify strategies for promoting and developing EDIA as they present in other health programs with viable application to dental education. Challenges to EDIA development within health education are identified at the organizational level, including: low representation of underrepresented groups and engrained Eurocentric biases within institutional policies and pedagogy. Tokenistic initiatives and training in EDIA concepts that fail to address core issues impacting diversity promotion within the Faculty were also identified as impeding true progress in this area. The barriers identified signal a need for Faculty leadership to reassess current diversity policies and look to frameworks and collaborations that can better support meaningful development.

Mullin et al. (2021) suggest that popularized health leadership frameworks in Canada such as the LEADS framework and its five core competencies are compatible with the principles of EDIA. These core competencies include: i) upholding justice, fairness and ethical standards, ii) exhibiting and supporting flexibility, open-mindedness, and ability to manage change; iii) enabling and uplifting talent, iv) developing and modeling a high standard of excellence and v) demonstrating accountability for results. These competencies are framed under strategic pillars that serve as guides for health leaders in approaching EDIA development. The adoption of structured EDIA development frameworks such as LEADS by organizational leaders are conceived to be compatible with the strategies founded in the literature for dental and health education. Strategies at the organizational level such as establishing collaborative relationships between programs and institutions as well as local community populations for CBE opportunities

are identified as strong recommendations for EDIA growth that may resonate with faculty member's personal development (Birch, 2013; Campbell et al., 2020; Moodley & Singh, 2018)

Overall, the literature suggests that steps need to be taken to improve dental faculty's personal EDIA capacity to reduce barriers to creating inclusive learning environments (Arday, 2018; Estrada et al., 2019; Martinez-Acosta & Favero, 2018; Ocegeuda et al., 2016; Risner et al., 2020; Simmer-Beck et al., 2013; Swartz et al., 2019; Zappas et al., 2021). Recommendations from the literature include the organizational provision of opportunities for facilitated learning for faculty members to develop EDIA skills and understanding (Martinez-Acosta & Favero, 2018; Zappas et al., 2021). Experiential learning opportunities for faculty that promote diversity in thought through interactive discussions are considered foundational to meaningful EDIA development (Campbell et al., 2020; Martinez-Acosta & Favero, 2018). Further, facilitated discussion opportunities are suggested to promote interpersonal reflection for faculty members that can serve to identify concealed barriers and bias in the institutional setting (Campbell et al., 2020; Martinez-Acosta & Favero, 2018; McGibbon et al., 2014; Zappas et al., 2021). As such, dental faculties looking to prioritize how EDIA concepts are understood and enacted amongst their members should look to dynamic avenues through which interpersonal communication experiences with diverse and underrepresented community members can be had in order to inform and identify gaps in current knowledge.

Organizational Commitment to Mentorship Opportunities

Organizational supports for increased mentorship opportunities conducive to EDIA development are also noted across health education. In particular, mentorship opportunities that allow for faculty and students to interact collegially and collaboratively on projects and research are identified pathways for promoting positive cultural understanding (Arday, 2018; Campbell et

al., 2020). The literature on mentorship models currently used within dental education are scarce, however evidence from the field of nursing suggest that the integration of faculty-student mentorship programs have produced positive results for underrepresented students' satisfaction in their program, sense of belonging, time management, critical thinking and academic outcomes (Crooks, 2013; Mokel et al., 2022). Further to this, diverse mentor-mentee relationships have been confirmed to have bi-directional benefits on both parties, including knowledge transfer that can remove stereotypes and improve recognition of cross-cultural differences (Campbell et al., 2020; Mokel et al., 2022). The overwhelming evidence available on the success of mentorship models between faculty and underrepresented learners makes a strong argument for the provision of these opportunities in dental education. However, the nursing literature emphasizes that these models require a firm commitment from organizational leadership to support mentors training and provide time dedicated to mentoring in order to be successful (Mokel et al., 2022).

Anti-Discriminatory Pedagogy and Inclusive Curriculum Design

An organizational commitment to diversifying and decolonizing the current curriculum is also targeted within health programs as a necessary strategy to address current bias, stereotyping, and racism engrained in current pedagogical models of education (McGibbon et al., 2014; Zappas et al., 2021). The decolonization of Eurocentric curriculum is an area that has been extensively researched in nursing and medicine in comparison to dental education (Green et al., 2021; McGibbon et al., 2014; Zappas et al., 2021). Anti-discriminatory pedagogical models and guided principles for inclusive curriculum design are presented within these fields and are identifiably transferable to dental education. The adaptation of these models warrants exploration by faculty leaders and members to revise and evolve current curricular content to be reflective of EDIA concepts. Beyond content revision, the opening up of the curriculum to include diverse

worldviews is deemed necessary to enacting an evolution of overall institutional cultural with positive implications for EDIA capacity building (Campbell et al., 2020; O'Leary et al., 2020).

Community-Based Partnerships

The literature has also highlighted that EDIA development strategies require a reimagining beyond the confines of the Faculty setting to be inclusive of increased involvement in community-based education initiatives (Birch, 2013; Johnson et al., 2007; Moodley & Singh, 2018; Ocegeuda et al., 2016, Sinkford & Valachovic, 2019). The involvement of faculty members in the creation and organization of community-institution partnerships and community clinics hold promise for avenues to increasing cultural understanding. Increased engagement with diverse local communities is offered in the literature as an avenue to foster community relations and ultimately, increased recognition of underserved population groups (Ocegeuda et al., 2016).

Learning devised through these forms of service-learning are identified as routes to increasing understanding of the social determinants of health impacting underrepresented populations and establishing rapport and trust that are conducive to EDIA understanding (Johnson et al., 2007; Sinkford & Valachovic, 2019). For dental Faculties, a commitment of resources and acknowledgement of local community leaders as stakeholders within the partnership model are assessed as sustainable pathways for establishing bidirectional learning for community members and dental faculty involved (Johnson et al., 2007). The extent to which these partnerships can positively influence personal EDIA development for dental faculty is in its infancy and therefore represents an area of untapped potential that warrants increased exploration by faculty leadership for developing EDIA capacity.

Interinstitutional Collaboration for Dental Faculties

Interinstitutional collaborations are also heralded in the literature as a promising avenue for EDIA development in health education (Arday, 2018; Campbell et al., 2020). There is a current emphasis across dental and health education on interprofessional collaboration in education (IPE). IPE represents a learning model that promotes teamwork amongst health education students and supports knowledge transfer and improved communication and skills development for integration into increasingly collaborative healthcare workforces (van Diggele et al., 2020). The World Health Organization's (WHO) Framework for Action on Interprofessional Education and Collaborative Practice (2010) confirms that involvement in IPE facilitates improved understanding of socioeconomic disparities and barriers within the population and augments outcomes of care; strengthening health systems overall. Increased collaboration between educational institutions is recognized as a distinct call to action within this framework (WHO, 2010).

The success of these collaborative models in bringing EDIA issues to light for students in working within health care teams stand as a novel route for similar EDIA development between dental programs. Currently in dental education, intraprofessional partnerships between dental institutions is commonplace for collaborations across research and specialty training programs. Therefore, there is an argument to be made that institutional partnerships for EDIA represent easily facilitated avenues in which dental faculty leaders can convene on approaches to EDIA across curriculum, faculty development and recruitment (Arday, 2018; Campbell et al., 2020).

Further to this, collaboration between institutions can serve to identify current weaknesses in dental education that are contributing to access and inclusivity barriers for underrepresented groups (Campbell et al., 2020; Martinez-Acosta & Favero, 2018). Collaboration between dental faculties may also inform strengths and strategies implemented at

single sites that stand to be employed across institutions to see fruitful evolution in EDIA across dental education programs overall. The literature confirms that institutional partnerships are yet to be explored to their full potential in dental education. However, there is tangible evidence to suggest interinstitutional collaboration for the purposes of EDIA development is a sustainable strategy to be explored.

Future Research

Research on EDIA capacity and promotion strategies in dental education are comparatively lacking in the literature compared to other health professions fields. Cross-institutional collaboration for EDIA development is recommended within the literature but there is little evidence to suggest that these collaborations are being pursued across dental institutions in Canada. Furthermore, despite the strategic initiatives described above, barriers to EDIA development prevail, such as faculty members' personal motivation to engage and the necessary time dedicated to EDIA capacity development against other competing work obligations (Campbell et al., 2020; O'Leary et al., 2020). Notably absent from the literature when compared with other health programs are the voices of dental faculty members themselves. There is minimal substantiative evidence within the current literature of any evaluation of dental faculty's self-perceptions of EDIA and that of the institutions in which they are employed (Behar-Horenstein et al., 2016). This stands as a significant deficit to our current understanding of EDIA capacity in dental programs with implications for how it is translated into the learning settings. Further research is therefore required of dental faculty members' personal perceptions and experiences with EDIA in order to better inform current strengths and identify weaknesses to EDIA development within dental education.

Conclusion

This narrative review identified barriers for underrepresented students in dental education and the current gaps in EDIA development at the organizational and faculty member level. To address these challenges, a myriad of proposed strategies from the literature to seeing purposeful EDIA development in post-secondary health education were identified. The findings of this review serve to highlight both viable avenues for dental faculty member EDIA development and the perceived barriers for sustainable EDIA capacity building in dental programs. To be leaders of change, concentrated and critical refinement of current approaches to EDIA will be necessary for dental faculties and their members committed to seeing the deconstruction of barriers for underrepresented students in dental education. The allocation of resources to mentorship initiatives, curricular revision and, facilitated discussion opportunities for EDIA development are merited. Involvement in interinstitutional and community collaboration should be pursued at the organizational and faculty member level to increase EDIA capacity in dental education. These strategies are identified as conducive to reconstructing dental learning environments through the lens of equity and inclusivity that promote positive cultural change in dental education for faculty and students alike.

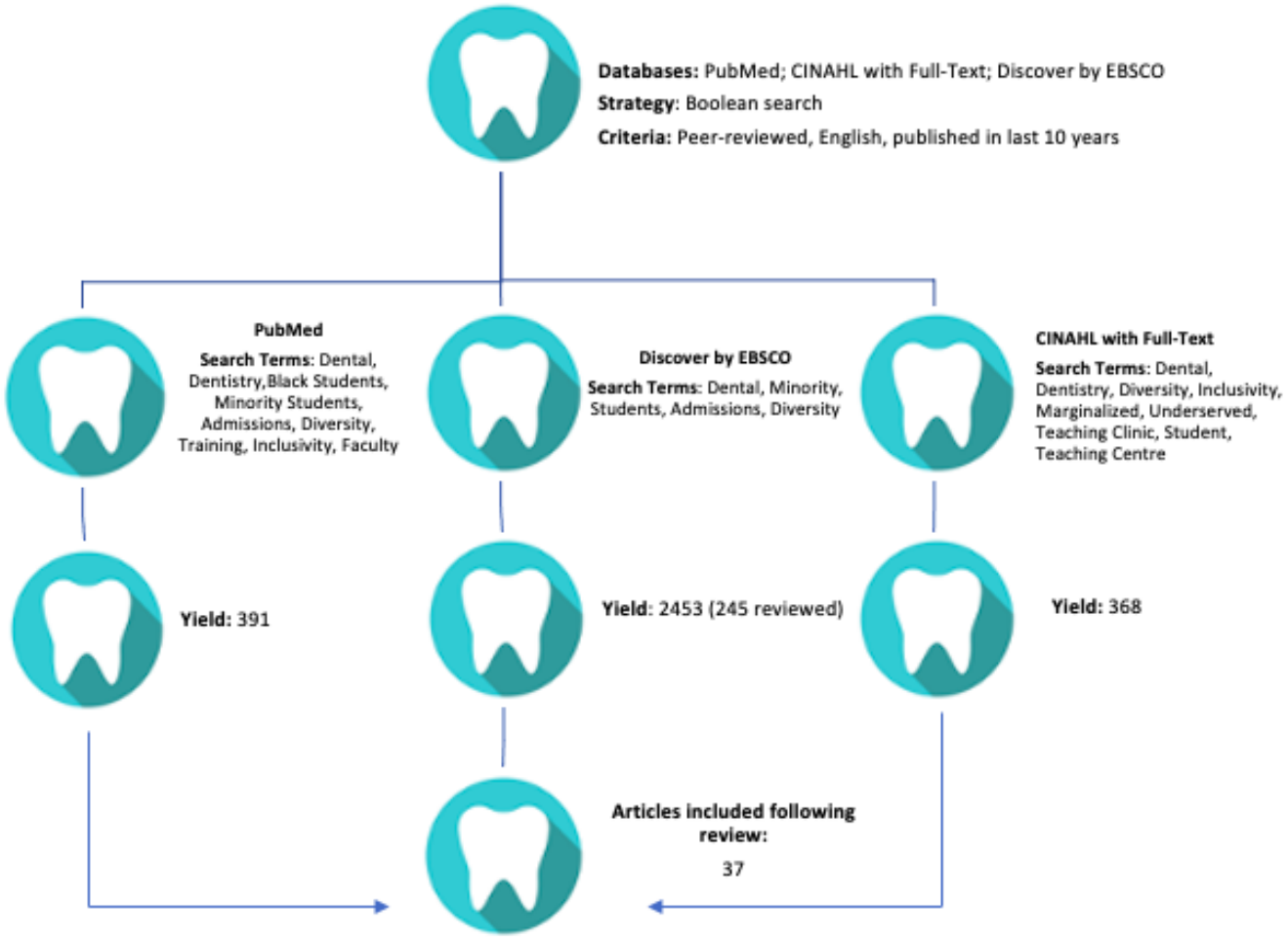
Table 1

Boolean Search Term Strategy

Database	**Boolean Search Terms**
PubMed	1. Dentistry* AND Black students AND Admissions 2. Dental AND Minority AND Students AND Admissions AND Diversity 3. Training AND Inclusivity AND Minority Students AND Faculty
CINAHL with Full Text	1. Teaching Clinic AND Dentistry OR Dental AND Underserved OR Marginalized AND Patient* AND Diversity OR Inclusivity AND Student AND Teaching centre.
Discover	1. Dental AND Minority AND Students AND Admissions AND Diversity

Figure 1

Synthesis of Literature Review Search



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Manuscript #2: "We Talk Teeth": Constructing a New Narrative of EDIA (Equity, Diversity, Inclusivity and Access) Capacity in Dental Education Using Hermeneutic Inquiry

Abstract

EDIA (Equity, Diversity, Inclusivity and Access) is recognized as a strategic area for priority development within dentistry and dental hygiene education. The creation of equitable and inclusive learning environments is conducive to diversity development with positive implications for supporting underrepresented students within dental programs. Faculty members are identified as key drivers of shaping the culture, attitudes, and behaviours within this environment. However, there is currently little evidence to inform how faculty members perceive their personal and institutional EDIA capacity. To address this gap, a hermeneutic study using a convenience sample of dental faculty members was conducted. The aims of this study were to answer the following research questions: i) How do dental faculty perceive their personal EDIA capacity and that of the Faculty of Dentistry in supporting underrepresented students? and ii) What are the perceived strengths and weaknesses of current Faculty EDIA development at Dalhousie University's Faculty of Dentistry? The findings revealed six dominant interpretations impacting EDIA capacity at the Faculty of Dentistry. Knowledge of EDIA language, interfaculty communication and institutional EDIA messaging are identified as prevailing weaknesses while community building and informal channels for EDIA development are identified as novel strengths meriting prioritization at the institutional level. Motivation to engage in EDIA by dental faculty members overall is illuminated in relation to human emotion. The findings offer a new narrative of current EDIA capacity at the Faculty of Dentistry and identifies viable pathways

for EDIA development in dental education with transferability to other health education programs.

Keywords: dental education, dentistry, dental hygiene, equity, diversity, inclusivity, access, faculty members, bias recognition, communication, capacity building, underrepresented, community, human emotion

Introduction

Increasingly, concerns regarding oppressive organizational systems and approaches to health education have been revealed that have contributed to inequitable educational access and experiences for underrepresented populations (Campbell et al., 2020; Shankar et al., 2013). This acknowledgment of deficits has prompted dental education, inclusive of dentistry and dental hygiene, to recognize and promote EDIA (Equity, Diversity, Inclusivity and Access) capacity as an area of strategic priority development. This involves the creation of Faculty EDIA agendas that look to bolster overall Faculty diversity through avenues for student recruitment and enrollment, faculty hiring, and formalized faculty training in EDIA concepts (Arday, 2018, Campbell et al., 2020; Martinez-Acosta & Favero, 2018; McGibbon et al., 2014; Vick et al., 2018; Zappas et al., 2021). Dental faculty members represent key contributors to the establishment and reinforcement of institutionally engrained norms and practices within the clinical and didactic learning settings. Faculty members' behaviour and teaching approaches have significant influence on perceived EDIA within the Faculty of Dentistry (FoD) and the experience of underrepresented learners. Currently, there is limited literature on EDIA capacity within dental education and little evidence to inform faculty members perceptions and experiences of EDIA in the dental learning environments. As such, the exploration of dental faculty members EDIA capacity and that of the settings in which they work is warranted to address this knowledge gap. In this hermeneutic analysis, I will examine the strengths and weaknesses of EDIA within dental education from the perspective of dental faculty.

Background

EDIA encompasses four core concepts. While distinct, all four concepts work together to better the lives and experiences of individuals. For the purposes of this paper, the definitions of

EDIA are those provided by the Government of Canada (2021). Equity is defined as a removal of systemic biases or barriers that are perceived to prohibit equal opportunities. Diversity means varied perspectives and lived experiences that are defined by a person's race, gender identity, age and ethnic origin amongst other self-identifying characteristics. Inclusion is defined by practices that ensure all persons are respected, supported, and valued equally. Accessibility is the promotion of environments without barriers that enable all persons to participate to their full potential. The influence of each of these concepts on an individual's personal perceptions and lived experienced within our society, coalesces under the conceptual framework of intersectionality. Here, social categorizations based upon race, ethnicity, gender and class combine and intersect with profound implications on how EDIA issues may resonate with an individual or group of persons (NCCJ, 2022). In particular, those who may self-identify with more than one underrepresented group or social category may experience injustices or discrimination related to multiple or all concepts under EDIA. The impact of intersectionality on the experiences of underrepresented students in the institutional setting further emphasizes the need for increased research and resource development on EDIA within health education programs (NCCJ, 2022). While the focus of this manuscript pertains to underrepresented groups based on culture, ethnicity and race, owing to the acknowledged gap in representation of these groups within dental education, it stands to be recognized that there exist additional underrepresented groups meriting increased research and support that are not covered in this study.

Improvements for EDIA are important in dental education as faculty members' approaches to teaching and patient care have a direct influence on the skills developed by student learners (Risner et al., 2020). Beyond the surface of clinical and theoretical aptitude, the

attitudes, perceptions and worldviews of faculty members are conveyed to students through their conscious and unconscious behaviours (Martinez-Acosta & Favero, 2018; McGibbon et al. 2014; Zappas et al., 2021). This has reverberating implications on the student experience and reaffirms institutionally embedded norms and practices (Shankar et al., 2013). Dental faculty members, when equipped with the appropriate resources, knowledge and supports, stand poised to positively shape the ways in which EDIA concepts are translated and enacted across the dental learning settings (Risner et al., 2019; Shankar et al., 2013). In extension of their personal development, the provision of supports for faculty to cultivate EDIA capacity is conducive to creating an equitable educational experience for diverse cohorts of students with varied cultural and personal needs (Risner et al., 2019; Shankar et al., 2013).

A review of the literature on bolstering EDIA capacity within dental and allied health education identifies a plethora of strategies enacted at varied tiers of Faculty development. Organizational changes, facilitated discourse opportunities, mentorship models and interinstitutional and community collaborations, have all been proposed as methods by which health faculties can improve EDIA (Arday, 2018; Behar-Horenstein et al., 2017; Campbell et al., 2020, Vick et al., 2018). While these strategies are concentrated at a structural level, absent from the discussion of EDIA are the voices of dental faculty members themselves. How dental faculty enact and engage with EDIA through their personal and perceived interpretations of operating within these learning settings remains an unexplored area (Behar-Horenstein et al., 2016).

Using hermeneutic inquiry, this study aims to answer the following questions: i) How do dental faculty perceive their personal EDIA capacity and that of the Faculty of Dentistry in supporting underrepresented students? and ii) What are the perceived strengths and weaknesses of current Faculty EDIA development at Dalhousie University's Faculty of Dentistry? It is the

researcher's intention that this study will reveal new interpretations of EDIA as informed by the voices of dental faculty members and may serve to guide future EDIA capacity development in dental education.

Study Context

At Dalhousie University, efforts towards increased inclusion and recruitment of students and faculty from underrepresented groups has been a driving element of the University's current Strategic Plan (Dalhousie University, 2019). Dalhousie identifies priority equity-deserving applicants as: women, persons with disabilities, 2SLGBTQ+ and racialized persons inclusive of those of African descent and persons of Indigenous ancestry (Dalhousie Community Equity Data Report, 2019). Under the categories of racialized persons and Indigenous, African Nova Scotians (ANS) and Mi'kmaw First Nations are specifically identified. These groups represent two majority underrepresented populations specific to Nova Scotia (ANSA, 2021; DCEDR, 2019). All of these groups are identified as currently underrepresented in post-secondary education (Diversity and Inclusion Strategy, 2019).

Dalhousie has seen moderate increases in recent years in their recruitment of individuals from these underrepresented groups (DCEDR, 2019). In 2019, the University published its first *Dalhousie Community Equity Data Report* (DCEDR, 2019) to inform EDIA and representation across all Faculties. At the student level within the FoD, ANS (2.8%) and Mi'kmaq (4%) identifying persons are represented at marginally higher, or proportionate levels of enrollment when compared to overall enrollment statistics across all programs (2% ANS; 4% Mi'kmaq). Similarly, women are highly reported as representing 63% of the student population at the FoD (DCEDR, 2019). While these institutional statistics reflect positively on the FoD's progress

in attracting student representation from these groups, it provides little context to the current organization and culture of the dental learning environment.

Within the FoD, targeted efforts have been invoked by senior leadership to see EDIA capacity developed. These efforts are reflected in initiatives such as the provision of EDIA seminars and online workshops for faculty members tailored to topics ranging from unconscious bias recognition to acknowledging microaggressions. Laudable efforts include the creation of its own in-house EDIA committee with a strategic mission to promote and develop EDIA values across faculty and student culture, curriculum design, admissions and recruitment from equity-deserving groups, (DCEDR, 2019).

In light of these achievements, dentistry as a profession and within the FoD at Dalhousie has grappled with achieving representation and banishing long-standing role stereotyping (Smith & Dundes, 2008). In particular, this includes a historical majority representation of males in dentistry and overrepresentation of females in dental hygiene (Adams, 2003; Smith & Dundes, 2008). This is in part owed to the original conception of the dental hygiene occupation as a subordinate role, tailored to women and created to help male dentists in their clinical work (Adams, 2003). The overrepresentation of female students enrolled in the dental hygiene program is problematic to the interpretation of female student representation reported in the DCEDR (2019) at the FoD.

The report shows that commendable strides have been made at Dalhousie to see diversity in gender representation achieved with women represented at 45% of all faculty instructors and at 80% in the ‘Health’ professions overall (DCEDR, 2019). Misleading in this reported data however is the aggregate reporting of the health faculties, inclusive of dentistry, medicine,

nursing, physiotherapy, occupational therapy, health promotion and others. As such, reliance on this data to inform achievements in gender parity made within the FoD itself is unreliable.

Public perception of dental hygiene as a female profession also continues to reinforce occupational gender segregation, similar to other female-dominated professions such as nursing (Kılıçaslan-Gökoğlu & Öztürk, 2020). Importantly, these prevailing gender biases have implications for achieving diverse representation beyond gender parity alone. Dentistry and dental hygiene at both the student and faculty level remain predominantly represented by White individuals, highlighting that additional barriers to accessing dental education exist for those from underrepresented and equity-deserving communities (Mertz et al., 2016; Sandino & Rowe, 2014). Aggregate reporting was also used to report representation of ANS (1-3%) and Mi'kmaq (1%) faculty members in the health professions, emphasizing the dismal representation of these groups in the health professions overall (DCEDR, 2019).

Design and Methods

Hermeneutic inquiry was selected as a suitable methodology by which to explore and assess how concepts of EDIA are perceived and enacted within dental education. A branch of phenomenology, hermeneutics is closely aligned with the study of the lived experiences of participants (Creswell & Poth, 2018; Dowling, 2004; Koch, 1996). However, adding complexity to this approach, is its focus on situating itself in exploring how the interpretation of human experience in relation to an event, can illuminate new understanding and challenge preconceptions of the phenomenon (Dowling, 2004).

According to Gadamer, it is through reflection that we can shed the constraints imposed on interpretation by our own prejudgments and perceptions of what is known (1989). Using hermeneutics to gather new perspective on current EDIA structures and practice within the FoD,

therefore required an immersive engagement with the personal experiences of faculty members. Beyond mere analysis however, there is also a need for deconstruction; where the face-value description of EDIA capacity is complicated through the identification of what Moules et al. (2015) call “exemplars and possible counter-exemplars” (p.119). This deconstruction is pivotal to uncovering concealed interpretations within the data that provide new and rich understanding through a fusion of these competing horizons (Nyholm et al., 2018).

Over prescribed method, hermeneutics binds itself to the concept of interpretation through praxis. Praxis is defined as an art of interpretation that uses cyclical processes of revisiting and re-reading the data interspersed with reflexive practice and re-interpretation (Moules et al., 2015). As researcher, my responsibilities therein included repetitive engagement with the dialogic experiences of dental faculty and significant reflexive practice throughout data collection and interpretation (Dowling, 2004; Kakkori, 2009). To address rigour in the study, I was further tasked within this process in confronting and contrasting my personal biases and prejudgments against my interpretations of the data in order to promote a broadened understanding of EDIA capacity within dental education (Kakkori, 2009).

A novel element of this study is that I hold a dual status, balancing the roles of researcher and member of the FoD. Being directly situated within the environments of study and holding preconceived knowledge of their subjective aptitude in EDIA, facilitates a deeper understanding of the collected data in relation to the contexts described by participants. This novelty, coupled with a collaborative interpretative approach amongst myself and the wider research team was crucial for establishing both rigour and coherence in the interpretation of the data (Moules et al., 2015). The ‘opening up’ of the topic that is central to hermeneutics was actively performed through attention to the data that was reflexive, in-depth and able to move beyond a superficial

interpretation of EDIA. This collaborative discussion served as a means by which to engage in the process of deconstruction that freed interpretation of the data from the confines of my personal perceptions (Moules et al., 2015). This cyclical and reflexive analysis facilitated a reconstruction of the current interpretation of EDIA capacity at the FoD.

Research Participants

Active didactic and clinical teaching faculty members at Dalhousie University's Faculty of Dentistry in Halifax, Nova Scotia, Canada were invited to participate. Eligibility was open to part-time, full-time and sessional dentistry and dental hygiene faculty members. An invitation to participate that outlined the aims and design of the study was circulated via Faculty ListServs email to all faculty members by the Faculty's Communications Officer. Interested participants were directed to follow up with the Principal Investigator (researcher) via email. Those interested in participating were provided a detailed study information pamphlet as well as consent forms. They were also provided the opportunity to follow up with the researcher regarding any questions or concerns they had regarding study methods or use of their data prior to confirming their consent. Participation involved a single 60-minute video-conferencing interview conducted online using the Microsoft Teams teleconferencing platform.

A convenience sampling method was used in this study, however efforts to invite faculty who represented different professional backgrounds, roles, genders and cultures was also strategized and employed through directed communication and echoed in the recruitment email. Ten faculty members consented to participate in this study. Of those consented, representation from a wide range of experiences was noted, including teaching experience, position within the faculty, professional background/specialty, race, culture and gender identification amongst other

self-identifying data offered by participants. As a result, the diversity demonstrated within the consented participant sample suggests that a purposeful sample was achieved.

Data Collection

Participants participated in a 60-minute interview conducted by the researcher on the topic of EDIA at Dalhousie University's FoD. All interviews were conducted using the online video-conferencing platform Microsoft Teams, housed on a secure server at Dalhousie University. Interviews were video recorded and transcribed verbatim using the in-platform transcription feature and further reviewed and edited for accuracy by the researcher. All interviews were de-identified during the transcription process in order to maintain participant anonymity and confidentiality.

The creation of a trusting environment, open to expression and conducive to participant discussion of strengths and insecurities was necessary to collect truthful interpretations of EDIA within the interview process (Nyholm et al., 2018). Participants were encouraged to speak openly and freely on their personal experiences of EDIA and to reflect on perceived strengths and weaknesses of the learning settings from both an organizational and personal lens. A series of flexible, guided interview questions were developed and used situationally to prompt participants to reflect upon contexts or topics that did not emerge out of organic discussion. This was done as a means to deepen participants reflection and description of events related to dilemmas and personal preconceptions of current EDIA capacity (See Appendix A). Participants maintained the autonomy to decline or skip answering any questions they did not feel comfortable answering or end the interview at any time without repercussion.

Data Analysis

The analysis process in a hermeneutic research study is characterized by a cyclical movement between what is known and what is yet to be uncovered (Gadamer 1960/2004 in Moules et al., 2015). It is through this examination of the whole in relation to its parts that the researcher is able to become well-acquainted with the data on the path to new understanding and creation of a 'new whole' (Boysen et al., 2017; Moules et al., 2015; Palmer et al. 2020). In order to uncover new meaning and understanding of EDIA capacity within dental education, a thorough analysis of participant interviews was conducted. This took the form of a repeated re-reading and engagement with textual data until data became familiar and emergent and novel ideas were denoted amongst the data sets. The data analysis process in hermeneutic inquiry is unique within the qualitative sphere, choosing to emphasize and identify where divergent ideas lie rather than concentrating solely on thematic convergence (Moules et al., 2015). To better understand dental faculty member's current EDIA capacity, this focus on the dissimilarities that arise within the data are critically important to developing meanings which contribute to a new understanding of current EDIA capacity.

To organize the transcribed data for interpretative analysis, a thematic coding approach was utilized and applied to each transcript. This process funneled similar ideas and thoughts together which were organized under specific thematic labels. While thematic identification is not a prescribed goal in hermeneutics, the process is acknowledged as a means by which to group ideas and relate statements on the path to interpretation (Moules et al., 2015). Through the thematic coding process, these ideas were revisited and comparatively interpreted against standout quotes and ideas from each participant interview. Member-checking was also used in select cases during data analysis in order to ensure my interpretation was representative of the experiences and perceptions conveyed by the participant during the interview process. The

transcribed and de-identified data, coding processes and emergent ideas identified were shared with the wider research team. Investigator triangulation was used to evaluate the meanings I ascribed to participants' dialogue and my personal interpretations of participants' experience of EDIA within the FoD. This method was used to identify and acknowledge the role of my personal prejudgements within the findings presented. While the process of interpretation represents a subjective task, informed by meaning that may be only partly uncovered through participant's dialogue, this process was pivotal to reconciling rigour within the interpretation. This cyclical movement from wholistic meaning, to thoughtful interpretation of parts and back again is conducive to a strong critical interpretation of the phenomena of EDIA capacity within the FoD (Boysen et al., 2017; Moules et al., 2015).

Ethical Considerations

Ethical issues arise within qualitative research when the researcher holds a dual role as a member of the institution of study (Caruana, 2015; Creswell & Poth, 2018). The concept of the 'insider researcher' may therefore threaten the validity of the research process. My personal identification as an insider stems from my position within the faculty as a dental hygiene instructor involved in both clinical and didactic teaching at Dalhousie University's FoD. In this position, I acknowledge that I have increased access to participants and with whom I may have previously developed relationships and rapport. While this familiarity is conducive to the creation of a safe and welcoming environment for participants, it also poses a potential conflict within the study. Specifically, the ability to produce a neutral account of the phenomena or avoid selection bias in the choice of participants is of concern (Caruana, 2015). It is also difficult to discern whether this familiarity contributed to limitations in the breadth of faculty members responses owing to any desire for maintenance of interpersonal and professional rapport.

To mitigate these perceived challenges to the credibility of the study, stringent design measures were put in place to combat perceived risks. As an example, the dissemination of the invitation to participate via a party external to the study was strategic to limit invitation bias (FoD Communications Officer). Interested participants were provided a study information pamphlet outlining their rights as a participant, which stated that their participation was completely voluntary, and that they held the option to withdraw from participation at any time. The selection of participants included in this study, data analysis, and final interpretations were all vetted amongst the wider research team as strategy to eliminate any risk of bias and provide reliability and credibility to the findings.

Further to this, this study was reviewed by both the Athabasca University Research Ethics Board and the Dalhousie University Research Ethics Board. Formal REB approval for Research Involving Human Subjects was received from both institutions prior to conducting this study [AU REB#24578; Dal REB# 2021-5879]. See Appendix B.

Results

Amongst the ten participants interviewed, members of senior faculty leadership, part-time clinical instructors and full and part-time associate professors, professors and instructors involved in the Faculty's clinical and/or didactic settings were represented. All participants completed the interview process in its entirety. At the time of interviewing, participants self-identified under the following descriptors: male, female, racially visible, First-Generation Canadian, immigrant, 2SLGBTQ+ and White European. These demographic characteristics lent to a diversified interpretation and discussion of lived experience within the FoD as related to EDIA understanding, interpretation and practice.

Analysis of transcribed interviews revealed six dominant interpretations of the data: pathways to bias recognition, having the 'right' words, checking boxes for EDIA, hierarchical lived experience, faith in others and breaking bread, breaking barriers. These ideas reflect both interrelated and divergent thought processes that highlight the variability amongst dental faculty members in how they perceive EDIA capacity in our education settings. On a deeper level, these findings also illuminate the challenges and successes to seeing EDIA capacity developed and supported within the FoD through the personal contexts and lived experiences of faculty participants. In what follows, each of the six identified interpretations are presented alongside impactful excerpts from the data that through processes of deep, reflexive and cyclical analysis brought forward new interpretations on faculty EDIA capacity at the FoD.

Pathways to Bias Recognition

Reflecting on implicit bias requires an evaluative process that is often intimate and uncomfortable. It can take the form of raw self-acknowledgement wherein limitations and insecurities become opened-up as they are uncovered (Sukhera, 2020). The majority of participants were forthcoming in expressing where they felt their own biases lay and the perceived reverberation of these beliefs into the student environment and experience. Recognition of these biases however holds weight for transformative opportunity. Interpreted from the data is that both personal and organizational biases and limitations related to current EDIA capacity were often revealed through interactions with student diversity. This was evidenced by one participant in a revealing student interaction that emphasized the impact of low faculty diversity on student's perceptions of the pre-clinical learning environment:

I just happened to come in at that point and they're like 'you look like us!' And they were like.. you know, it's not that they said 'oh you look like us' but they kind of made a comment like they took notice of that. […]we kind of got into a conversation about like how we were raised, and they all are children of immigrants. So for us, like we kind of, I guess, I kind of stepped out of that instructor role and I came down more to like, you know, I guess we had shared experiences that way […] but it was just a moment in time where I was like, 'Wow!' Like, I just.. I don't know. I guess I don't think about that kind of stuff.

The revelation of biases through diverse student interactions was also confirmed by another participant in describing students' clinical rotation scheduling and accommodation requests during cultural fasting periods.

And he just said, you know, I would rather have autonomy, so some days if I'm not feeling well, I would rather be able to take it as a personal day as opposed to being standing up in the operating room and faint or something like that because I'm not well. […] You know, when there's kind of… just so many differences, you sit there and you're just like, I just feel so naïve or ignorant, right?

Noteworthy, is the extension of these revealing interactions beyond the learning setting. Lapses in acknowledging diverse cultural needs and customs were also identified in relation to faculty's planning of celebrations of student achievement. This was echoed by a participant in discussion of student requests to shift graduation event timing outside of prayer or fasting windows.

…things we just don't think about. And you're like 'Oh my gosh, why did we do that?' or 'of course you do that!' […] like what a difference though! For like a small insignificant thing, that really doesn't make a huge impact, or have a negative impact on other people, like

'we're going to bump your dinner for an hour so that everybody can eat at the same time'. Like, what a message that sends, you know?

There is an emergent emphasis that faculty recognize that that their own assumptions and knowledge of cultural rituals are improved as they are exposed to a more diversified student body. As a result, awareness of the FoD's prevailing organizational EDIA deficits stand to be informed through the cultivation of diverse student representation in dental programs.

Having the 'Right' Words

Several faculty members reported uneasiness around using appropriate terminology related to EDIA. These sentiments were revealed through discussion of perceptually sensitive subject matter involving conversations of race, culture, gender and ability. Revealing from participant responses, is the tightrope on which unease teeters on the border of fear. Participants' responses admonish an externalized fear of culturally thoughtful or genuine actions being misconstrued as prejudice or incompetency within the learning setting. Poignantly, these experiences draw attention to internalized fears, inherently linked to personal competence perception with EDIA. For faculty members, these external and internal insecurities are interpretatively intertwined with concerns of how their actions and messaging are perceived by student learners from underrepresented populations. A glimpse of this internalized struggle is noted in one participant's response to the opening interview question, "at a glance, how do you perceive the FoD's current EDIA capacity?":

> *We certainly do attract diverse individuals from different backgrounds [participant hesitates] ... I'm scared of saying something wrong... like using the wrong terms, but I mean, there's a lot of diversity.*

Later, self-perception of how this fear translates to a lack of confidence in personal interactions within the student learning environment is vocalized. In discussion of an incident involving teaching head and neck cancer screenings and the assignment of a male clinical instructor to oversee two self-identifying female Muslim students, they described:

[student name removed] assured me that I handled it very well at the time, but those types of things... just being more mindful but also aware of them. And I think I was so afraid to ask them if they were OK because I didn't want to offend them because I want to treat them the same. But also knowing when to be treating... when's it's appropriate to treat them differently. And that's where I really struggle.

These sentiments were confirmed in the dialogue of participants who expressed reasonable satisfaction with their personal competency in this area. Competency was often linked with participant's relating their own specific background or experiences.

A lot of times we may be stumbling over words. We want to do, we want to say the right things to students but we just don't have the cultural competence or you know.. understanding of what's right and what's wrong. […] I've been teaching in public and private institutions for 18 years so just through experience, you know... but those experiences might have played out a little bit differently if I'd had, you know, some kind of training.

As one participant with substantial experience and advocacy involvement with a particular underrepresented community confided,

> *I feel like I might know more than a lot of people do… and I still don't know a lot! […] I feel like I'm never caught up. And not that I'm trying to get caught up 'cause, you know, it's constantly evolving, but I always feel like I'm behind.. and then the word that I was supposed*

to use now.. I get worried.. I'm like, is that the word we're still using? Am I gonna use them wrong?

Poised with the opportunity to reflect and elaborate on their personal comfort with racial and cultural conversations proved an unveiling exercise for many participants. Often, this prompted reflection on situational contexts where self-perceived incompetence became translated to the learning environment in the form of silence or inaction.

It's more about what isn't being said or done.

Conflicting interpretation of dental faculty's ability to become competent in this area was also recurringly echoed by participants in consideration of the siloed divide of dental education. The emphasis in these reflections was that dental education is dominantly entrenched in the sphere of speciality-specific scientific and healthcare theory as well as clinical motor skill development.

We're so focused on doing clinical things like actually providing healthcare and we're trying to do the dentistry, dental hygiene, prevention.. like actually being service-oriented.. that takes up a lot of time […] I don't feel like I'm as up to date as other faculty members would be that are maybe in more of the Social Science or Arts Sciences. I believe that all the time. Like.. that's the language that they speak all the time. Whereas, we're like.. ***we talk teeth****. And that's our language. And so I don't know if we're ever going to be fully caught up, sadly, because it's just not our world in one sense.*

Here, the interpretation of EDIA language as being jarring to adopt within the realm of dental curriculum and teaching is illuminated. This suggests a muted acceptance amongst dental faculty of these concepts as belonging to 'other' and seemingly at odds with the established foci of dental education programs.

Checking Boxes for EDIA

Overtly, across participant dialogue, faculty members expressed worry regarding the communication and interpretation of EDIA within the Faculty. In particular, concerns of seeming tokenistic or ingenuine in developing approaches to seeing EDIA capacity bolstered within the FoD were offered by participants.

> *I also kind of wonder like, I know EDIA is certainly on their [senior leadership's] mind. It's a priority for us and we're trying to move the needle in the positive direction. But then you start to wonder like… if you're plastering it everywhere, does it lose value?*
>
> *I think faculty and staff appreciate the importance of EDIA, but we also have to be careful not to actually give so much EDIA learning that they just become disengaged because that is a risk.*

Overarchingly, participant reflections pinpointed a high personal motivation and commitment amongst faculty members to move beyond the concept of box-checking for EDIA. Participants relayed that current approaches to faculty EDIA development inclusive of sporadic offerings of online-training modules or semi-annual guest speakers were viewed as substandard stand-ins for true faculty engagement and development of EDIA.

> *..I think where [we] fail, is not recognizing that it's not this big massive thing that will come at you. And that, when it comes to EDIA it's little blocks that you get and you chew and you swallow and you process them overtime. But the way it's marketed to us as these big courses that you take and all of a sudden, you're diverse!*

Several participants offered baring reflections that illuminated a siloed interpretation of EDIA as it is packaged and communicated to faculty members. These reflections highlighted the restrictive parameters the institution has imposed on what is deemed 'under the umbrella' of

EDIA. These excerpts dually bring to light how biased institutional messaging manifests itself as a challenge to capacity building for faculty members with divergent interpretations of EDIA.

> *It's like we've pivoted too much in the other direction. There's almost this fear or concern from white males that it would look bad if they asked to be on the [EDIA] Committee. Yet, they need to be on the committee, I think. And so, I don't think we have the proper representation from everywhere [..] it's not a diverse committee when you have that. But I mean, then do you go to like the students and say, OK, well, we need.. you know, a White male student to join the committee. It just feels weird or odd to ask that question right?*

> *...you put a bunch of purple people in a room and there's going to be EDIA issues amongst all the purple people […] people bring to the table different skills sets that require different levels of access and different levels on inequality in order for them to be capable of whatever […] and so I think we missed that point when we talk about different ways of honouring EDIA. We always go to colour and gender right away […] we need to work actually just as hard at eliminating that stereotype around it as we do about furthering what it means. Because I think we're really stuck on that.*

These participant reflections carry a profound significance, bringing attention to the problematic ways in which the meaning of EDIA is selectively communicated within the institution. A dominant theme of the EDIA definitions presented at the outset of this paper centre on the idea of EDIA as encompassing of 'all persons' (GoC, 2021). This emphasis on universal inclusion supports the concerns expressed by some participants that current approaches to engaging with EDIA at the FoD are at odds with its intended message, wherein the lived experiences of all individuals are "respected, supported and valued equally" (GoC, 2021).

Hierarchical Lived Experience

Participant's interpretations of the FoD's EDIA capacity were often offered in self-reflection of where participants situated themselves within the composition of overall faculty diversity. The process of ascribing self-identifiers proved a telling indication of faculty's personal evaluation of their ability to be comfortable with EDIA concepts. Commonly, self-identifying information was used to exemplify perceived personal shortcomings in EDIA. As well, participants described an interpretation of personal EDIA capacity as being contingent on a hierarchical ranking of lived experiences. Within these discussions, the suppression of discriminatory experiences related to equity and inclusion matters were comparatively valued as secondary when set against racial or cultural discrimination. These reflections provide a new lens to the prevailing interpretation of 'what matters' when discussing EDIA as a concept.

I'm a Caucasian female, I don't feel like I've had.. I have not experienced what a lot of other people have experienced in my life. Have I experienced misogyny? Absolutely, I have. But you know, I haven't experienced some of the horrific things that I've seen other people experience.

Depending on who's in the room, your experiences might mean something, or they might not.

Further emphasizing the prevailing interpretation at the institutional level of EDIA as a hierarchical structure of self-identifiers was the experience of one participant within the faculty hiring process:

There was this one question that asked if you are a non-visible minority and I didn't select [xx] and I was like, 'cause I didn't want to get selected because of that. But I do remember, afterwards they told me that I was going to get picked, but they wanted to make sure... they said, you should put that on there because it's upper campus [head institutional

administrative office] that are the ones that approve it and they didn't want another white male.

Participant experiences reflect that self-identification practices glaringly dictate at both the personal and institutional level what, or who, is deemed conducive to promoting EDIA. This adds an additional layer to the theme of unconscious bias within current institutional messaging on EDIA. Such messaging can be further interpreted from faculty responses as limiting to the actualization of strategies that favour equitable EDIA capacity building.

Faith in Others

Participants acknowledged weaknesses relating to available structural resource and student support materials for EDIA. As well, faculty members confided they had limited knowledge of how EDIA concepts are overtly integrated within the educational settings and curriculum material outside of their own environments or teaching responsibilities.

I just know the students are safe, so we just kind of set up those basic protocols.. but as far as, you know, their recognition of EDIA or anything.. I can't speak to that.

I would hope that, you know.. there are EDIA conversations now that are threaded throughout our curriculum […] I probably don't know the specifics of all the, you know, kind of curricular paths that our students take to know where to weave this in and where we don't and where there are gaps still.

Of significance within this discussion however, was that many participants revealed a prevailing confidence and trust in fellow faculty members to proactively initiate conversations on EDIA and promote inclusivity within the clinical and didactic learning settings. As participants expressed,

I mean, I know this faculty, and I know the School of Dental Hygiene very well, and I know that these instructors are certainly bringing it forward […] So I have confidence that we are, but can I give you concrete evidence? I don't know if I could.

Like, the people are awesome and you want to get up everyday and go to work or school or whatever. And I really think we have that in spades, like I think our people are our best resource that we have.

[there are] things that we're doing better, like we have [faculty member name] who has this really great relationship with our First Nations community. So there's little pieces that are happening.

I think that we have so many people that are motivated to be involved and so many people that are passionate about it that I think that that's probably our biggest strength.

While participants emphasized a strong conviction in the attitudes and efforts of their fellow faculty members, weaknesses relating to interfaculty communication were commonly situated alongside these conversations. As one faculty member shared,

You know, people are doing great things… and I just feel like we all need to have a better understanding of what everybody else is doing. And I'd love to see […] like, never really having one person on their own deal with things […]So if we can have teams working together on things from any perspective, but particularly EDIA then everybody knows what everybody is working towards and the more ideas that we have, the better right?

EDIA concept integration within the FoD's learning environments is subsequently interpreted in its current form as partially reliant on a blind faith in others to introduce and establish these conversations within the curricula for students. Identifiably existent however are challenges in confirming and situating where gaps in the FoD's current approaches to EDIA lie resulting from low communication efforts at the faculty level.

Breaking Bread, Breaking Barriers

Reflection on current EDIA activities within the FoD revealed the hidden impact of fun and informal events, often centered around food and eating. In particular, a lunch-hour event established by international students within the Faculty provided an opportunity for diverse ethnic and cultural groups of students and faculty members to come together to share the cuisine of their home countries and their culture with the wider Faculty. These events were commonly cited by participants in reflecting on EDIA within the FoD but in terms that trivialized them in comparison to formal EDIA training initiatives. While relegated by participants as 'silly' to bring up in these large discussions of EDIA, these conversations emphasized the valid impact of intimate shared experiences facilitated by food in promoting a sense of togetherness. As one participant reflected,

> *We do these international food days! And I'm like, what a silly, fun sort of thing.. that is just kind of a fun thing with a lot of our QP [international DDS qualifying program] students. But like.. that's introducing like.. food, that is that one internal thing we all cling to, right!?[...] people like to feed people.. it's a way to show love and care [...] it really is a way to bring things together and bring people together.*

These events were also identified as a mode of humanizing individuals within the Faculty. Through food, acknowledgements of individualism were revealed, and facilitated new interpretations of faculty member and student identity. In particular, cultural food sharing was revealed as a vehicle for understanding others that moved beyond the preconceived labels ascribed within the context of the educational setting.

> *You know when like the students would make food from their cultures or countries and bring in it [..] like I really enjoyed that. Like having that one day of exposure. People you see in clinic or around the school, you see them as like a [particular] student; DDS3 [third-year dentistry],, DH2 [second-year dental hygiene].. but then like seeing them representing their culture.. its nice, like you're seeing another side of them.*

For one faculty member, self-identifying as a First-Generation Canadian, the significance of food as an integral piece to how underrepresented individuals may self-identify was further emphasized,

> *My parents growing up very much wanted to impart to us.. sort of our [xx] culture and that, like any culture, is done through food and language. Religion aside, it's whatever.. that's fine. But language and food certainly are a part of who I am and how I connect [..] it's the one way for those who are eating.. that is, to really get people to learn about your culture, it's through food. It's awesome.*

Despite its outward simplicity, food is strongly represented within faculty member responses as integral to establishing a broadened understanding of current diversity and EDIA capacity within the FoD. Further to this, events centered around communal experiences are identified as powerful avenues by which previously concealed commonalities can be revealed amongst faculty members and students.

Discussion

This study contributes to the limited literature currently available on EDIA in dental education and offers new perspectives as informed by the lived experiences of dental faculty members. Emergent in the data was that discussions of EDIA amongst faculty members revealed an interpretation of the concept as grounded in perceived inequities related to race, ethnicity and culture. As a result, this interpretation served to frame the narrative presented within this manuscript on EDIA in dental education as it relates to issues of underrepresentation under these categories. For faculty members, the reflective process of discussing their personal EDIA and that of the Faculty also revealed divergent and complimentary views that are unified by a single fundamental concept; human emotion. The power of human emotion in discussing EDIA permeates within all six identified interpretations from the data. The role of emotion in this study illuminates that dental faculty's perceptions on EDIA are inherently tied to the emotionally provocative experiences that transpire within the dental learning settings. From these unified interpretations, the strengths and weaknesses of the FoD's current EDIA capacity are identified and will be discussed in relation to the wider literature. Finally, I will discuss the influence of human emotion on capacity building that can lend to pathways and strategies for the reconstruction and promotion of EDIA in dental education.

Transformative Learning Through Students

Martinez-Acosta and Favero (2018) note that pathways to inclusive capacity building require that institutional communities come together to challenge and question their environments via open exchange on sensitive issues that may arise when EDIA concepts are discussed. The dialogic data of faculty participants revealed that building EDIA confidence requires faculty's personal dedication to the process as well as involvement in settings where

transformative learning can occur. These opportunities however require facilitation by the institution, constructing settings where faculty can engage in meaningful discussions and personal reflection on EDIA. The ability of faculty to retain and support underrepresented students in health programs is augmented when faculty are provided opportunities to identify and reflect introspectively on implicit bias and comfort with EDIA topics such as race and racism (Karani et al., 2017). Conversely, as both this study and the literature suggest, achievements in student diversity overall represent a critical piece in the provision and development of faculty member's EDIA (Campbell et al., 2020; Vick et al., 2018).

Increased interactions and communication with diverse learners within the learning environment are identified in the data as revealing experiences for faculty. The significance of these interactions are identified in the literature as a requirement for faculty members to be able to have transformative personal experiences that strengthen understanding of their personal EDIA capacity (Karani et al., 2017; Vick et al., 2018). In particular, this study's findings illuminate the bidirectional education in EDIA concepts that are achieved through diverse faculty-student interactions. At the same time that dental faculty are charged with constructing learning environments that reflect EDIA concepts, diverse student cohorts are also framed within the findings as EDIA 'teachers'. In this light, students are leaders in identifying unconscious barriers and perceived limitations that exist within the dental education setting. Increases in student diversity overall and the noted ability of dental faculty to reflect and extract meaning from increased exposure to diverse students are noted strengths of the FoD's current EDIA capacity.

While diverse student cohorts hold a transformative role for faculty EDIA development, dependency on these students to inform barriers must be approached with caution. A hidden

burden often carried by underrepresented students and faculty members within the settings of post-secondary education is that of cultural taxation. Described by Padilla (1994), this 'taxation' is characterized by the institutional designation and perceived obligation of underrepresented individuals to assume the role of 'representative' for the cultural group to which they belong. In this context, underrepresented students are unjustly bestowed the title of 'expert' for their culture (Hirschfield & Joseph, 2012). Here, there is a subsequent expectation placed on underrepresented students to demonstrate good citizenship to the institution by serving as the diversity representative and spokesperson where gaps in ethnic representation or knowledge are identified (Hirschfield & Joseph, 2012; Padilla, 1994). The risk of imposing this cultural tax on diverse students within dental education can be mitigated through continued efforts to thoughtfully recruit and support the retention of higher levels of underrepresented students in dental programs overall.

Comfort With Language and 'Other' Curriculum

The findings have also importantly highlighted the current climate of dental educators' self-perceived competency and comfort with EDIA language. Within the findings, faculty's interpretation of scientifically-based healthcare theory and education as being irreconcilable with proficiency in this knowledge base was revealed. Here, I suggest that there is an identified redirection of fault relating to incompetence in this area owing to the reductive models of clinical-based teaching. Faculty member's interpretation of social sciences theory as 'other' within the realm of pedagogical models is problematic for the integration of EDIA into dental education. However, as the literature suggests, these sentiments are similarly echoed within other clinically-based health profession programs including nursing and medicine (Karani et al., 2017;

Zappas et al., 2021). This points to a need for strategies to evolve the current language and teaching models used across health education programs (Karani et al., 2017; Zappas et al., 2021).

In direct contrast with dental faculty's current interpretation of EDIA language however, lies the emphasis on person-centered care delivery in dental education (Behar-Horenstein et al., 2017; Formicola et al., 2003; Park & Howell, 2015) The ability to relate, emphasize and effectively communicate cross-culturally is dependent on fostering interpersonal communication skills (Behar-Horenstein et al., 2017; Formicola et al., 2003). Furthermore, it is recognized by national associations and licensure bodies for dentistry and dental hygiene programs in Canada as a skill requirement for entry-to-practice (CDHA, 2010). The overt requirement for dental professionals to have knowledge of EDIA concepts and culturally sensitive language emphasizes how dental faculty's current interpretation of EDIA language as 'other' is at odds with professional expectations of dental clinicians. Further to this, faculty's self-reported ill-preparedness to address EDIA conversations and dilemmas within the learning setting has negative implications for students' EDIA development. Developing EDIA capacity in dental students is identified as a priority objective that must be fostered alongside their clinical aptitude. Glaringly however, the data reveals that there is a pressing emphasis on developing capacity amongst faculty members' in order to see these concepts integrated into the learning environment for students.

Dental faculty member's perceptions of feeling ill-equipped to approach sensitive situations involving EDIA are concurrent with similar findings of nursing faculty's self-reported incompetence and discomfort with this language (McGibbon et al., 2014). Strategies noted in the literature include the introduction of classroom exercises that encourage the discussion of

expressions and euphemisms that are used to talk about underrepresented subsets of the patient population (Bearman & Ajjawi, 2013). Integrating activities that promote discussion using EDIA language allow both students and teaching faculty to reflect on their personal social actions and to explore conscious and unconscious bias (Bearman & Ajjawi, 2013). This open-discourse style of learning activity holds potential for prompting conversations that can promote recognition of how actions and communication used in professional practice contribute to social interpretations (Bearman & Ajjawi, 2013). These exploratory discourse activities may help to rectify the current interpretation of EDIA language as inconsequential to the dental setting by emphasizing an association with the management and care of diverse patient groups. While EDIA language is interpreted as a current weakness of EDIA at the FoD, the study findings and literature highlight that increasing opportunities to communicate and contemplate openly on EDIA with students and fellow faculty members is a path through which dental faculty can begin to build comfort with EDIA language.

Impacts of Institutional EDIA Messaging

The role and influence of communication is also identified as a dominant undercurrent of the findings in this study. As the data have revealed, the interpretation of EDIA at the faculty level is heavily influenced by how the concept is packaged and presented to members by the institution. The current institutional messaging around EDIA is revealed in the findings as a current weakness to EDIA at the FoD. The broader communication of this concept at the University-level has a trickle-down effect to how EDIA is translated into practice at the FoD and impacts how it is experienced by faculty and students within dental education.

Discussions of EDIA in the literature commonly point to the challenges faced by organizational leadership in defining this complex concept (Mullin et al., 2021). As a result, a

reliance on prescriptive criteria that places emphasis on box-ticking items thought to fall under EDIA are relied upon to reflect commitment to diversity agendas (Arday, 2018). The findings reflect the problematic chasms of this approach, implementing biased hierarchy of self-identifying characteristics to promote diversity while unconsciously stifling true efforts towards diversification. Conversely, EDIA as it is currently communicated negatively impacts increasing inclusivity efforts within the faculty. As Mullin et al. (2021) note, for leaders in health care academia, verifiable commitment to EDIA and enacting change initiatives requires a thoughtful reevaluation of the 'who and why' of the voices at the table. Furthermore, it emphasizes the need for leadership to engage in a cyclical review of *equity* within the Faculty to ensure *diversity* is promoted in all domains (Swartz et al., 2019). The findings in this study suggest that EDIA at the FoD requires a collective psychological shift that embraces a broader interpretation of diversity overall. Recognizing skills sets, experience, as well as alternative perceptions and knowledge bases are identified as best strategy to achieving diversified representation and ideas that will move dental faculties forward in EDIA (Mullin et al., 2021; Swartz et al., 2019).

Interfaculty Communication Deficits on EDIA Curriculum

The findings reveal that a lack of structured avenues for collaborative curriculum discussions on EDIA are a barrier to identifying gaps in the curricula and the integration of EDIA content into teaching. These findings suggest that communication lapses surrounding curriculum are representative of a major weakness at the faculty level, with implications on how these concepts are relayed to students and to patient care theory. Insufficient communication of EDIA concepts in combination with the clinical components of patient care further solidifies the perceived bias of dental education as incompatible with social science. Furthermore, communication deficiencies are revealed to have culminated in an overreliance on assumptions that faculty are

actively introducing EDIA concepts on their own accord. While this strong faith in others reflects positively on faculty dynamics, low interfaculty communication on EDIA within the curriculum is a noted weakness at the FoD.

Fostering Strong Faculty Communities

Dental education as a whole is commonly identified as situated within a siloed domain of health education (Alfano, 2012; Gambhir, 2015). Operating largely in the private sphere in Canada, oral health care has traditionally lived on the fringes of the primary care realm and has faced challenges to integration into interprofessional care models (Gambhir, 2015). In light of this, the dental community itself tends to be relegated to a small, tight-knit group of practitioners and educators that intimately understand the nature of the profession and habitually assume the role of advocates for the profession. Strong sentiments of community and trust in fellow colleagues are notable findings in this research and are identified as significant strengths to EDIA development at the FoD. Proximal relationships facilitated by shared working environments, have been identified as conducive to building trust within groups (Sutherland et al., 2021). In relation to EDIA capacity building, dental faculty reflect an optimism and faith in their fellow members to be proactive instigators of EDIA initiatives and curriculum within the learning settings. This evaluation holds significance for EDIA capacity building potential. As Aunger et al. (2021) note, achieving high levels of faith and trust within organizations is conducive to increasing collaborative behaviour. For dental faculties looking to build EDIA capacity, cultivating a sense of community amongst members proves a pivotal step forward.

In extension of cultivating community, is the theme of food as a common cross-cultural language. Across faculty member reflections, events around food were revealed as a method of communication that transcended barriers to EDIA that may be perceived due to cultural or ethnic

differences. As Marovelli (2019) noted, “commensality, the act of eating together, is an important human ritual that benefits beyond the biological need for food” (p. 190). Rather than subsistence, shared eating experiences are identified within the literature as a means of creating new identities and understanding. Furthermore, offering food to others is identified as a visceral symbolism of caring for others while jointly communicating social meaning (Hamburg et al., 2014). As it relates to EDIA at the FoD, informal events around food are identified as an instrument through which members can explore social constructs and create solidarity with underrepresented groups (Giacoman, 2016 in Marovelli, 2019). The reflections from faculty members reveal that preconceived biases about individual and cultural/ethnic group identities are mitigated through shared experiences that promote meaningful knowledge transfer. The act of eating together was found to promote the sharing of cultural norms and experiences and is acknowledged as a successful vehicle to enhance diversity at the FoD by removing barriers through recognition and familiarity.

The observations provided by dental faculty members further highlight the impact of informal avenues towards building EDIA capacity. In particular, grassroots events such as cultural food sharing days were interpreted as one of the most resonating experiences for faculty members when reflecting on EDIA activities within the Faculty. These findings suggest that in comparison to formalized EDIA events, informal experiences that are entertaining and leisurely promote EDIA at a transformative level for faculty members. The pleasurable shared experience of eating together is identified as one viable avenue for challenging weaknesses to EDIA through the promotion of new perceptions, unconscious bias recognition and overall community bonding.

Meeting at Emotion

Binding these identified interpretations of EDIA together is the role of human emotion on faculty member's motivation to engage. For participants who commented on their experiences with appropriate EDIA language, emotions of guilt, fear and self-defense were reflected within responses. These emotions proved powerful enough to allow for feelings of self-doubt to drive *inaction*, in scenarios where participatory action could have led to meaningful learning opportunities for faculty members. These behaviours can be interpreted through the critical lens of White fragility; a state of intolerable racial stress prompting defensive displays of emotion in White members of society. Silence and abandonment of stress-inducing situations when racial issues arise are acknowledged as defensive mechanisms exhibited under the concept (DiAngelo, 2011). These faculty experiences further reflect the significance of habitus disruption on motivation to engage as described by DiAneglo (2011). Habitus is the acceptance of established prejudgment that reinforces and reproduces certain action, perceptions and thoughts. Emotional triggers have the ability to disrupt the prevailing habitus that can prompt resistance in the form of avoidance, tuning out, or a reversion to placating to wounded emotions (DiAngelo, 2011).

However, as participants echoed within their experiences with diverse students, emotional triggers can also disrupt prevailing assumptions positively. Recognition of unconscious biases relating to diverse cultural practices evoked strong emotional responses including humility and increased attentiveness that facilitated faculty's personal development and motivation to invoke positive organizational changes. These findings reveal that sensitive EDIA experiences can provoke strong emotional responses by faculty that resonate with behaviour within the learning environments and facultys' motivation to engage.

The influence of emotion was also reflected when discussions turned to EDIA events where participants experienced emotions such as fun or pleasure. This form of emotional response

reflected a high motivation to engage, however these events were subjectively interpreted as not holding the same weight or significance to EDIA development as structured, educational events on the topic. This demonstrated conflict between emotional experience and prejudgment is problematic to EDIA promotion. As Lovoll et al. (2017) suggest, emotions have two distinct functions: 1) to follow pre-established motivation through supporting or not supporting the individual's prevailing attitude and 2) to identify new avenues for change that positively influence motivation and behaviour. The emotions revealed by participants in relation to EDIA harken to comments relating to the current communication of this phenomena within the FoD. In its current interpretation, EDIA is presented as a serious or immense undertaking, thus incompatible with being enjoyable or pleasant. This messaging unduly sustains this pre-established conceptualization of EDIA and may be perpetuating weaknesses related to faculty attitudes of apprehension towards best approaches to EDIA promotion.

The influence of emotional response to EDIA may represent a hidden contributing factor to low motivation to engage with EDIA initiatives. This suggests that there is a prevailing emotional acceptance of EDIA as an additional burden or task for faculty to take on, on top of onerous existing work obligations. Researchers within the field of psychology have suggested that extrinsic motivation can undergo processes to become intrinsic when a paired with positive experiences that allow individuals to recognize new interests and values (Lovoll et al., 2017). The findings of this study suggest that a current weakness to EDIA at the FoD lies in how it is currently communicated within the Faculty. The prevailing interpretation by faculty members that EDIA development is incompatible with positive emotional experiences is to the detriment of seeing intrinsic motivation to engage nurtured with the faculty. As such, EDIA capacity within dental education stands poised to be dramatically altered through the redirection of leadership

attention and resources to basic, humanistic initiatives that value emotion and community over prescribed boxed checking for EDIA.

Limitations

It would be inadmissible not to recognize that a limitation to this study lies with the researcher's personal self-identification. As a White, heteronormative woman, my interpretations of the data are undeniably influenced by my preconceptions and understanding. In spite of my personal convictions to educate myself on barriers for underrepresented populations and engage meaningfully in reflexivity, I acknowledge that my values and perceptions are founded in my own experiences, privilege and conceptualization of our world as a White woman. As a result, I accept the interpretations presented in this study to be my own, while recognizing the place of my prejudgements in the process of conducting hermeneutic research.

In addition, the focus of this study pertained to examining the EDIA capacity of dental faculty and dental programs ability to support students belonging to underrepresented groups based upon culture, ethnicity and race. As a result, it must be acknowledged that there exist additional groups experiencing underrepresentation within health and dental education based on gender, class and other self-identifiers that are equally deserving of focus and attention. The researcher-imposed limitations on underrepresented groups of focus in this study are in reflection of those most visibly underrepresented within the FoD. This limitation is also acknowledged as a condition of feasibility for the scope of a Master's level thesis project, pointing to directions for future research of underrepresented groups in dental education and the role of intersectionality.

Another limitation in this study is related to the inability of the researcher to confirm if the selected sample for this study was representative of faculty demographics. Self-identifying data of dental faculty members was unavailable, therefore I am unable to say with certainty how

the participant sample is representative when looking at the FoD in its entirety. This creates possible limitations in the data. While efforts were made to capture the experiences and perceptions of a diverse sampling of faculty participants, segments of the underrepresented faculty population are acknowledged as potentially missing within this study. Satisfying the inclusion of all voices in this study to develop a truly wholistic interpretation of EDIA within dental education was a noted challenge. The reliance on data derived from a single institutional site is also limiting to the findings.

Strengths and Future Research

A strength of this research is that it provides a new interpretation of EDIA capacity in dental education from the lens of dental faculty which is an area largely underexplored in the current literature. To my knowledge, there is currently no available evidence on how EDIA is experienced and interpreted within the dental learning settings by dental faculty members, highlighting the important contributions of this work.

The minimal evidence currently available on dental faculty member's personal and perceived EDIA capacity points to a need for further research. Multi-institutional analyses at a pan-Canadian level are warranted in order to more accurately identify variances and confirm findings of the current strengths and weaknesses of EDIA capacity within dental education overall. Further to this, as the findings of this study have suggested, longitudinal studies looking at the evolution of EDIA capacity at the FoD in response to increased grass roots and community building activities is yet to be fully explored and are identified areas of EDIA development potential meriting future study.

Conclusions

Using a hermeneutic lens, this study reveals a reconstruction of the interpretation of EDIA as it is currently presented is warranted within dental education. In particular, reconciling the social science of EDIA within this setting requires a deconstruction of its current messaging and how it is communicated across the FoD. For faculty members to feel confident and empowered in their understanding of EDIA and its integration within the learning environments, emotionally stimulating experiences are required. Dental programs should look at allocating support to less formalized channels for EDIA development as there is a marked need for dental education to pivot away from structured events and tokenistic nods to EDIA. Reliance on current approaches to inform EDIA are noted as unconsciously restricting approaches to capacity building based on prescribed institutional parameters for EDIA.

The increased facilitation of social experiences that promote emotional provocation through interactions between diverse faculty and students are found to be avenues for shared experiential learning on EDIA. These social experiences are evidenced to inform weaknesses within the faculty, reveal biases and create new understanding. I propose that true growth in EDIA can be achieved through meaningful, grassroots actions that build on the sense of belonging and togetherness that serve at the core of inclusivity and EDIA itself. In acknowledgement of EDIA development as a continuous journey, further research is warranted on how EDIA is conceptualized, communicated and enacted within dental programming. However, the results of this study are significant in illuminating a new, evolving narrative of EDIA within dental education and sustainable pathways for capacity building at the faculty level.

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Appendix A: Guiding Interview Questions

EDIA Guiding Interview Questions

1. How do you perceive the FoD's current EDIA capacity?
2. Can you identify an area where you think we could improve our EDIA and cultural competency?
3. How would you describe your current involvement with EDIA activities at the FoD?
4. **For those involved in clinical teaching:**

- Are you personally involved in service-learning initiatives? Can you identify any benefits you have personally derived from these experiences as it relates to EDIA?

5. **For those involved in didactic teaching:**

- Have you perceived any cultural bias in the lecture material or resources you deliver? Do you feel EDIA concepts are reflected within course content?

6. Do you feel there are adequate supports in place as a faculty member for you to support underrepresented students' learning needs?

- **If yes,** ask to elaborate
- **If no,** where would you like to see more supports? What needs do you personally perceive for your own EDIA development?

7. What would you envision if given the opportunity to design a training program for Faculty EDIA?
8. What barriers have you personally witnessed or experienced within the Faculty in creating an inclusive learning environment?

Appendix B: Athabasca University REB Approval

Athabasca University
RESEARCH CENTRE

CERTIFICATION OF ETHICAL APPROVAL

The Athabasca University Research Ethics Board (REB) has reviewed and approved the research project noted below. The REB is constituted and operates in accordance with the current version of the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2) and Athabasca University Policy and Procedures.

Ethics File No.: 24578

Principal Investigator:
Ms. Lindsay Macdonald, Graduate Student
Faculty of Health Disciplines\Master of Health Studies

Supervisor:
Dr. Lorraine Thirsk (Co-Supervisor)
Dr. Venise Bryan (Co-Supervisor)

Project Title:
Filling the Holes: An Exploration of Faculty EDIA (Equity, Diversity, Inclusivity and Access) Capacity in Dental Education

Effective Date: December 08, 2021 **Expiry Date**: December 07, 2022

Restrictions:

Any modification or amendment to the approved research must be submitted to the AUREB for approval.

Ethical approval is valid *for a period of one year*. An annual request for renewal must be submitted and approved by the above expiry date if a project is ongoing beyond one year.

A Project Completion (Final) Report must be submitted when the research is complete *(i.e. all participant contact and data collection is concluded, no follow-up with participants is anticipated and findings have been made available/provided to participants (if applicable))* or the research is terminated.

Approved by: **Date: December 08, 2021**

Barbara Wilson-Keates, Chair
Faculty of Health Disciplines, Departmental Ethics Review Committee

Appendix C: Dalhousie University REB Approval

DALHOUSIE UNIVERSITY
Research Services

Health Sciences Research Ethics Board
Letter of Approval

December 20, 2021

Lindsay Macdonald
Dentistry\Dental Hygiene

Dear Lindsay,

REB #: 2021-5879
Project Title: Filling the Holes: An Exploration of Faculty EDIA (Equity, Diversity, Inclusivity and Access) Capacity in Dental Education

Effective Date: December 20, 2021
Expiry Date: December 20, 2022

The Health Sciences Research Ethics Board has reviewed your application for research involving humans and found the proposed research to be in accordance with the Tri-Council Policy Statement on *Ethical Conduct for Research Involving Humans*. This approval will be in effect for 12 months as indicated above. This approval is subject to the conditions listed below which constitute your on-going responsibilities with respect to the ethical conduct of this research.

Effective March 16, 2020: Notwithstanding this approval, any research conducted during the COVID-19 public health emergency must comply with federal and provincial public health advice as well as directives from Dalhousie University (and/or other facilities or jurisdictions where the research will occur) regarding preventing the spread of COVID-19.

Sincerely,

Lori Weeks

Dr. Lori Weeks, Chair